

**Agenda Notes  
for  
53<sup>rd</sup> Meeting  
of the  
PROJECT SANCTIONING & MONITORING  
GROUP-I  
(PSMG – I)**

**Venue:**

**Conference Hall (Room No. 123-C)  
Ministry of Urban Development  
Nirman Bhawan  
New Delhi**

**At  
3.00 PM  
on 19<sup>th</sup> January 2016**



**National Capital Region Planning Board  
Ministry of Urban Development, New Delhi.**

**Agenda Items for the 53<sup>rd</sup> Meeting of the  
Project Sanctioning & Monitoring Group-I (PSMG-I)**

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**Agenda Item No. 1: Confirmation of the Minutes of the 52<sup>nd</sup> Meeting of the PSMG-I**

The Minutes of 52<sup>nd</sup> PSMG-I Meeting, held on 21.5.2015 were circulated to all members vide NCR Planning Board letter No. K-14011/3/2015/PMC/NCRPB dated 1.6.2015. No comments have been received. A copy of the same is placed at **Annexure-I**.

The Minutes may be confirmed.



**Agenda Item No. 2: ATR of 52<sup>nd</sup> PSMG-I meeting decisions**

The following actions have been taken on the decisions of the 52<sup>nd</sup> Meeting of the PSMG-I held on 21.5.2015:-

<b>Agenda proposed &amp; decisions taken</b>	<b>Action Taken / Status</b>
<p><b>Agenda Item No 3: Status Note on Assistance by Asian Development Bank (ADB) and KfW (German Development Bank) to NCRPB</b></p> <p>With regard to pending reimbursement of commitment charges due to the non-starter projects of Haryana &amp; Delhi, Secretary (UD) requested the State Governments to expedite the reimbursement of commitment charges as NCRPB has already borne the amount.</p> <p>Regarding the social safeguard issues on ADB projects involving non-payment of compensation to the title holders against as the PWD (B&amp;R) Haryana's adverse possession of the land for over 50 years in respect of two road projects viz., Sonapat District Roads and Gurgaon-Chandu-Badli-Bahadurgarh Road. Additional Chief Secretary, PWD(B&amp;R), Haryana mentioned that :</p> <ul style="list-style-type: none"> <li>the issue pertaining to payment of compensation for affected, encroached structures in Gohana-Lakhanmajra-Bhiwani Road, which is mandatory for projects under ADB line of credit, had been referred by PWD (B&amp;R) Haryana to the State's Law Department for advice.</li> </ul> <p>Secretary (UD) emphasized that as agreements had been executed</p>	<p><i>Govt. of Haryana reimbursed the amount of commitment charges on 9.12.2015.</i></p> <p><i>However, the reimbursements towards commitment charges from GNCT Delhi are yet to be received despite requests from NCRPB as well through Secretary (UD).</i></p> <p><i>A letter from Hon'ble Minister of Urban Development, GOI to Hon'ble Chief Minister of Delhi has also been sent in this regard.</i></p> <p><i>Detailed status note presented at Agenda Item No. 3</i></p>



Agenda proposed & decisions taken	Action Taken / Status
between ADB / NCRPB / PWD (B&R), the issue needs to be resolved early and requested ACS, PWD (B&R) to take necessary action accordingly.	
<p><b>Agenda No.4:</b></p> <p><b>Projects Re-submitted to NCRPB with Loan Requests with revised scope of work post PSMG approval</b></p> <p><b>Agenda No.4.1 A :</b> <b>Construction of road from Junction of NH-10 &amp; NH-71 at Southern Bypass in Rohtak District</b></p> <p><b>Agenda No.4.1 B :</b> <b>Various Roads in Rewari Division (Hailymandi to Pahlawas road, Kosli-Guryani to Pahlawas NH-71 Dahina Jatusana road) in Rewari District</b></p>	<p>Decision of the 52<sup>nd</sup> PSMG meeting was conveyed to PWD (B&amp;R) Deptt. Govt. of Haryana/HSRDC vide Board's letter no. I-12013(7)/HNA/2013-14/F&amp;A dt. 17.06.2015, PWD (B&amp;R) vide its letter dated 08.09.2015 has executed (2) two revised loan document and action on the same <b>(4.1A)</b> and <b>(4.1B)</b> have been taken as under:-</p> <p>Revised Sanction for the loan amount of Rs. 20.75 Cr. issued on 17.6.2015. The first installment of Rs. 8.30 Cr. released on 15.9.2015 after completion of necessary loan documentation.</p> <p>Revised Sanction for the loan amount of Rs. 62.65 Cr. issued on 17.6.2015. The first installment of Rs. 25.06 Cr. released on 15.9.2015 after completion of necessary loan documentation.</p>
<p><b>Agenda Item No. 5:</b> <b>Revision of project costs &amp; corresponding loan amounts for the ongoing water supply projects at Nuh, Pataudi and Farukhnagar from PHED Haryana</b></p>	<p>Decision of the 52<sup>nd</sup> PSMG meeting was conveyed to PHED Govt. of Haryana vide Board's letters dated 17.06.2015. PHED, Govt. of Haryana vide its letters dated 16.10.2015 has executed Revised loan documents.</p> <p>Revised Sanctions for the reworked loan amount of Rs. 112.50 Cr., Rs. 30.86 Cr. and Rs. 10.43 Cr. for Nuh, Pataudi and Farrukhnagar water supply projects respectively were issued on 17.6.2015.</p>
<p><b>Agenda No.6: New Projects submitted to NCRPB with Loan Requests</b></p>	<p>Administrative approval of the competent authority as per decision of 52<sup>nd</sup> PSMG conveyed vide sanction order no. I-12013(1)/HNA/(Manesar)/2015-16/NCRPB Dated 02.07.2015. The actual loan release was subject to various conditions. One of the condition was to furnish a certificate from T&amp;CP Deptt. as well as HSIIDC</p>



Agenda proposed & decisions taken	Action Taken / Status
<b>Agenda Item No. 6.1: Water Supply Project at IMT Manesar by HSIIDC</b>	<p>confirming that the project site as well as area for which the project is envisaged do not fall under Natural Conservation Zone (<b>NCZ</b>).</p> <p><i>The same is yet to be received from HSIIDC.</i></p>
<p><b>Agenda No.7: Review of Projects financed by the NCR Planning Board</b></p> <p>Regarding a nonstarter “Solar Bus Shelters with Solar Lantern Recharging Stations in Alwar District” project of UIT Alwar, for which loans sanctioned in December 2012 &amp; released in July 2013, Secretary, UD directed UIT Alwar that a proper plan of action &amp; timeline be submitted to NCRPB and cautioned that if the project does not start soon, the necessary loan released may be recalled and loan sanctioned would be cancelled.</p> <p>Similarly, regarding Office Building project of EDMC sanctioned in 51<sup>st</sup> PSMG-I, Secretary (UD) cautioned that in case time lines are not provided, a decision will be taken to cancel the sanctioned loan.</p> <p>Six of the ongoing projects had since been reported completed, the necessary Utilization Certificates &amp; Completion Certificates are still awaited from the agencies - DHBVN, PWD (B&amp;R), Directorate of Technical Education, Haryana; UIT Kota and Patiala Urban Development Authority. Secretary (UD) advised that the necessary action be taken by the concerned departments in this regard and the requisite submissions be expedited.</p> <p>Projects shall be considered for shifting to completed list after receipt</p>	<p>While the necessary plan of action and timelines were requested for the project repeatedly, the requisite replies are <b>still pending</b>.</p> <p>While the agency did provide some timelines, the same have not been adhered to due to tender issues. The project remains a Non Starter as per latest information. BOQs had been updated as per DSR 2014 and were under approval. Fresh tenders were to be called post approvals.</p> <p>UC/CC received for 3 projects (Patiala, Kota and Power project in Hisar) which have been verified and can be shifted to list of Completed projects.</p> <p>UC/CC still awaited for Rohtak Institutions project from DTE Haryana, Power project of HVPN and Rewari roads (new roads) project.</p> <p>Details presented at Agenda 6.</p>



Agenda proposed & decisions taken	Action Taken / Status
of necessary UC/CC and on-site verification of reported completion.	
<p><b>Agenda Item No. 8 : Creation and Updation of Regional Land use for the five additional districts of NCR</b></p> <p>Proposal submitted by NRSC for Creation and Updation of Regional Land use for three additional districts of NCR with cost estimate of Rs. 22.6 lakhs was approved</p>	<p>Since inclusion of three districts namely Mahendergarh &amp; Bhiwani in Haryana sub-region and Bharatpur in Rajasthan sub-region was notified by Ministry of Urban Development, the proposal for creation of Regional Landuse for three districts was approved by the PSMG-I in its 52nd meeting held on <b>21.05.2015</b> with an estimated cost of Rs. 22.6 lakhs. Total area covered in the study is 11,744 sq.km</p> <p>Memorandum of Understanding was signed between National Remote Sensing Centre (NRSC) &amp; NCR Planning Board on <b>11.09.2015</b> at Hyderabad for the Study on “Creation of Regional Land use for the three additional districts of NCR”.</p> <p>Resourcesat-2 LISS-IV, 5.8m Spatial resolution, Multispectral data pertaining to <b>2013</b> has been procured, geo-referenced for all the 3 Districts.</p> <p>Regional Land use interpretation is complete for 5,000 sq.km. of area which works out to be around 50% of the total area.</p> <p>Resourcesat-2 LISS-IV, 5.8m Spatial resolution, Multispectral data pertaining to <b>2015</b> has been ordered. This data will be used for updating regional land use.</p>



### Agenda Item No. 3: Status Note on Assistance by Asian Development Bank (ADB) and KfW (German Development Bank) to NCRPB.

#### Asian Development Bank

ADB has approved a loan of US \$ 150 million to NCRPB as a Multi-Tranche Financing Facility for financing infrastructure projects in the National Capital Region (NCR) and its Counter Magnet Areas (CMAs). The loan agreement for the 1<sup>st</sup> tranche of US \$ 78 million was signed between ADB and NCRPB on 17.3.2011. Out of Tranche-1 loan amount of USD 78 million, USD 18 million has been cancelled. Board has already utilized the entire loan amount of USD 60 million (INR 352.06 crore) by the loan closing date of 31.12.2014 for tranche1. The repayment period is 25 years with 5 years moratorium for repayment of the principal amount. The loan is disbursed to participating States subject to compliance with ADB procurement guidelines and environmental and social safeguards requirements.

**A. Status of Projects under ADB line of credit:** The status of projects identified for financing under the ADB loan facility is as follows:-

S. No.	Project/Agency	Project Cost (Rs. Cr.)	Loan Sanctioned (Rs. Cr.)	Current Status
1	Improvement of Roads in Jhajjar districts, Haryana - PWD (B&R)/HSRDC	169.98	127.48	Completed
2	Improvement of Roads in Sonapat district, Haryana - PWD (B&R)/HSRDC	125.40	94.05	Completed * Project is non-compliant with the Social Safeguard policy of the ADB
3	Construction of Badli-bypass, Haryana - PWD (B&R)/HSRDC	62.92	39.45	Completed
4	Widening & Strengthening of Gohana Lakhnamajra Bhiwani road upto district Rohtak boundary road from km. 0.000 to 37.700 - PWD (B&R)/HSRDC	99.77	74.83	Implementing Agency is claiming it as completed, However, Social Safeguard issue is still pending for compliance with the Social Safeguard policy of the ADB.*
5	Widening & Strengthening of U.P. border Sonapat Gohana road upto District Sonapat boundary from km. 11.600 to 74.000 - PWD (B&R)/HSRDC	176.26	132.20	Substantially Completed
6	Widening & up-gradation of Gurgaon-Chandu-Badli Bahadurgarh Road - PWD (B&R)/HSRDC	244.10	183.08	Contract awarded and work is in progress. Project is non-compliant with the Social Safeguard policy of the ADB.*





S. No.	Project/Agency	Project Cost (Rs. Cr.)	Loan Sanctioned (Rs. Cr.)	Current Status
7	Sonepat Drainage Scheme - PHED, Haryana	21.72	16.29	Contract awarded and work is in progress.
8	Augmentation of Water Supply in Pataudi - PHED, Haryana	41.15	30.86	-do-
9	Water Supply Scheme for Nulhar Medical College & Nuh town - PHED, Haryana	150	112.50	-do-
		<b>1091.3</b>	<b>810.74</b>	

\* The projects are non-compliant to the Social Safeguard policy of the ADB, however IA has started looking into the issues but the compliance in full is still awaited. Project wise status note having Social Safeguard issues are as follows:

### 1. Sonepat Roads (Sonepat-Farmana Sisana Road):

The sub-project is having dispute in land ownership in two sections, in the first section (2.5 km from chainage 21.500 to 24.000) road exists at a stretch where there is no land owned by PWD(B&R), Haryana as per the revenue record; 14 civil suits filed by private persons claiming ownership; matter is *sub-judice*.

In the second section (2.8 km, from chainage 24.974 to 27.780), when villagers claimed their ownership, Haryana State Road & Bridges Development Corporation (HSRDC) issued Land Acquisition Notification, however discontinued after civil suits are filed in the above mentioned first section.

The matter has been highlighted at various level including at the level of the Hon'ble Minister of Urban Development and the Hon'ble Chief Minister, Govt. of Haryana.

**Latest Development:** MD, HSRDC in continuation of the meeting held on 18.11.2015 under the Chairmanship of Member Secretary, NCRPB in Chandigarh has asked the Superintending Engineer, Sonepat Circle PWD (B&R) vide letter dated 24.11.2015 on the status of his given assurance that the case will be referred to the office of the DRO Sonepat, Govt. of Haryana to make entries of mutation in the name of State Govt. on priority basis. ***Confirmation on compliance in full is awaited.***

### 2. Gurgaon-Chandu Badli Road:

Under this sub-project, in village Dhankot, some villagers approached court alleging that the road is being built on their land. Road exists in 24 m. However in land records, road land is limited to 5 m. HSRDC / PWD represented in the court that road exists for last 50-60 years and is under their adverse possession. The matter is presently *sub-judice*. There are a large number of owners who have not moved the court. It has been suggested to HSRDC that in all stretches having land ownership/title dispute, HSRDC may proactively bring all such cases



to the court, claiming its land ownership and requesting for mutation in favor of Govt. of Haryana.

**Latest Development:** MD, HSRDC in continuation of the meeting held on 18.11.2015 under the Chairmanship of Member Secretary, NCRPB in Chandigarh has asked the Superintending Engineer, Gurgaon Circle, PWD (B&R) vide letter dated 24.11.2015 on the status of his given assurance that the case will be referred to the office of the DRO, Gurgaon, Govt. of Haryana to make entries of mutation in the name of PWD B&R/State Govt. on priority basis. ***Confirmation on compliance in full is awaited.***

### **3. Gohana-Lakhan-Majra-Bhiwani Road (GLMB):**

Issue of payment of compensation (compensation to be paid for lost assets (but not for land)) to the affected persons in the sub-project 'Widening & Strengthening of Gohana-Lakhan-Majra-Bhiwani Road from Km 0.000 to 37.700 is pending for compliance with the Social Safeguard policy of the ADB.

**Latest Development:** PWD (B&R)/HSRDC has approved & declared an amount of Rs.20,53,538/- to be paid as compensation towards the encroached structure. However, Executive Engineer, PWD B&R has conveyed vide letter dated 03.12.2015 that compensation have been paid to 33 beneficiaries out of the total 69 affected person as on date. The payment of compensation to the remaining 36 affected person is under process. ***Confirmation on compliance in full is awaited.***

***Matter is placed before the PSMG for information.***



**B. Reimbursement of Commitment Charges:**

Three projects viz., two MMTC projects at Anand Vihar and Sarai Kale Khan and Panipat water supply project have been dropped.

**B1.Commitment Charges pertaining to Govt. of Delhi:** A Letter dated 18.11.2015 was issued by the Hon'ble Minister of Urban Development to the Hon'ble Chief Minister, Govt. of NCT of Delhi requesting for reimbursement of commitment charges to the tune of Rs.69,95,613.81 up to 31.01.2013 being borne & paid by NCRPB to ADB on account of the two non-starter projects of the Transport Department, Govt. of NCT of Delhi. The Hon'ble Minister has also highlighted the details of the earlier several letters issued by NCRPB to the Govt. of Delhi in this regard.

In the 35<sup>th</sup> Board Meeting of the NCR planning Board held on 09.06.2015, it has been decided that the amount which has been paid by the Board to ADB towards commitment charges may be recovered from GNCTD, Delhi

However till date the Govt. of Delhi has not paid the commitment charges to NCRPB.

**B2. Commitment Charges pertaining to Govt. of Haryana:** An amount of Rs. 28,91,520/- has been reimbursed by PHED, Haryana on 09.12.2015.

**C. Debt Service:**

Board has been making regular payments of its dues to ADB. So far, Board has made payment of Rs.4.36 cr. (\$0.74 million) to ADB on account of interest and commitment charges.

***Matter is placed before the PSMG for information.***



**KfW - (German Development Bank)**

Loan agreements of Euro 100 million + Euro 1 million Grant for environment friendly schemes in the water supply, sewerage, drainage, solid waste management and urban transport Sectors to National Capital Region Planning Board were signed between NCRPB & KfW on 09.02.2012 & 30.03.2012. The repayment period will be 15 years with 5 years moratorium for repayment of the principal amount. The loan is at a fixed rate of Interest @ 1.83% p.a. A total amount of Rs.136.58 Crores (Euro: 19.31 million) has been claimed & disbursed by KfW to the Board.

**A. The status of projects to be funded under KfW line of credit are as follows:-**

Sl. No.	Name of the Project	Project Cost (Rs. Cr.)	Loan Sanctioned (Rs. Cr.)	Current Status
1	Augmentation of Water Supply in Kota, Rajasthan - UIT, Kota	151.66	113.74	Completed.
2	Water supply scheme at Farrukh Nagar Distt., Gurgaon - PHED, Haryana	13.90	10.43	Contract awarded and work is under progress.
3	Sewerage scheme at Farrukh Nagar Distt., Gurgaon - PHED, Haryana	11.48	8.61	Due to poor response to the tender, PHED has now decided/agreed to split the project into two packages. Re-tendering is under progress. Financial Bid Evaluation is under progress.
4	Sewerage scheme and treatment plant for SADA, Gwalior - SADA, Gwalior	28.38	21.28	This project is divided into two contract packages. For Sewerage Network Scheme, tendering is under progress. Technical Bid Evaluation is under progress. For Sewage Treatment Plant, Bid documents are under preparation by SADA, Gwalior.
5	15 Mld Sewage Treatment Plant and Pumping Station At Ecotech-II, Greater Noida - Greater Noida Industrial Development Authority (GNIDA)	21.17	15.87	Re-tendering was proposed due to poor response to the tender floated on 09.05.2014. The revised tender floated on 08.05.2015. However, IA has submitted the Technical Bid Evaluation



Sl. No.	Name of the Project	Project Cost (Rs. Cr.)	Loan Sanctioned (Rs. Cr.)	Current Status
				report requesting for re-tendering as only one Bidder is responsive. NO Objection issued on 07.12.2015.
6	20 Mld Sewage Treatment Plant and Pumping Station At Ecotech-III, Greater Noida - Greater Noida Industrial Development Authority (GNIDA)	28.15	21.10	-do-
7	Raw Water Conveyance Main from Intake at Dehra (Ghaziabad) to WTP Site at Palla (Greater Noida) and Clear Water Main from WTP Site to Master Reservoir (Greater Noida) Under 85 Cusec Ganga Jal Project for Greater Noida - Greater Noida Industrial Development Authority (GNIDA)	183.19	137.39	Re-tendering is proposed due to poor response to the tender floated on 09.05.2014. Re-tendering is under progress. Financial Bid Evaluation is under progress.
8	Primary Treatment Works at Dehra (Ghaziabad) & 210 Mld Water Treatment Plant At Palla (Greater Noida) & Allied Works Under 85 Cusec Ganga Jal Project For Greater Noida - Greater Noida Industrial Development Authority (GNIDA)	121.48	87.16	-do-
9	Alwar Water Supply Upgradation Scheme - PHED, Rajasthan	174.86	131.14	Conditional NOC for Bid documents provided on 01.09.2015. The project was tendered on 06.10.2015.
10	Rajgarh Water Supply Upgradation Scheme - PHED, Rajasthan	20.24	15.18	Re-tendering is proposed due to poor response to the tenders floated on 11.11.2014. Re-tendering is under progress.
11	Behror Water Supply Upgradation Scheme - PHED, Rajasthan	26.02	19.51	- do -



Sl. No.	Name of the Project	Project Cost (Rs. Cr.)	Loan Sanctioned (Rs. Cr.)	Current Status
12	Tijara Water Supply Upgradation Scheme - PHED, Rajasthan	16.46	12.35	- do -
13	Bhiwadi Water Supply Scheme-PHED, Rajasthan	40.69	30.52	Re-tendering is proposed due to poor response to the tenders floated on 01.10.2014. Re-tendering is under progress.
		<b>837.68</b>	<b>624.28</b>	

It is to be mentioned that out of Euro 100 million loan, NCRPB has already utilized an amount of Euro 19.31 million till date. As most of the Implementing Agencies (IA's) were not conversant with the International Bidding Procedures & Practices, out of the 13 projects under KfW line of credit 11 projects could not be awarded on time. NCRPB is making all possible efforts to expedite the Bidding process and Award of Contracts to improve the disbursement status. The matter is being taken up with all the implementing agencies and is being monitored by NCRPB on regular basis.

However, as the KfW loan is on reimbursement basis, NCRPB would not be in a position to utilize the entire loan of Euro 100 million by the loan closing date i.e., December 2016. Therefore, in order to utilize the balance loan amount, it is essential to extend the loan period beyond December, 2016 for a further period of 2 years i.e. up to December 2018. In context of this, Member Secretary, NCRPB has issued a letter dated 09.11.2015 requesting Ministry of Urban Development to forward the request of NCRPB to Department of Economic Affairs (DEA) for extending the loan period up to December 2018 on the same terms and conditions as specified in the loan agreement signed on 09.02.2012 & 30.03.2012.

#### **B. Debt Service:**

Board has also been making regular payments of its dues to KfW. Board has made payment of Rs.8.40 cr. (€ 1.08 million) to KfW on account of interest and commitment charges up to 30.11.2015.

***Matter is placed before the PSMG for information.***



**Agenda Item No. 4: New Projects submitted to NCRPB with Loan Requests**

The Board has received requests for sanction of financial assistance for:-

**Agenda Item No. 4.1: Development of access controlled Kundli-Manesar-Palwal Expressway section (Manesar RD 83.320 to Palwal RD. 135.650 km) by HSIIDC, Haryana (balance works)****Introduction**

The Transport Plan policies and strategies of the Regional Plan-2021 recommend that accessibility should be provided to all parts of the NCR to promote and support economic development. It further calls for linkages amongst regional centers and also sub-regional centers with efficient transport network for facilitating faster movement of traffic amongst such centers.

Due to increase in the economic activity and consequent load on road transport, the road network in the Haryana sub-region of the National Capital Region needs improvement in terms of carriageway width, crust thickness, and removal of inherent deficiencies such as acute curves, new construction of roads such as ring roads, bypass etc, NCRPB has been regularly providing financial assistance to Haryana for its road development in the Haryana Sub region.

As per orders of Hon'ble Supreme Court of India, non-destined heavy traffic to Delhi is banned. Therefore, such traffic is to be provided with alternative corridors for movement. Hence, in order to enhance development of the project influence area, Government of Haryana has proposed western Peripheral expressway as early as 2004 i.e. Kundli Manesar Palwal 0/0 to 135/650 forming a half ring road on west side of NH 1 and NH 2 and commenced works from July 2006 with the completion date as July 2009. Due to various reasons the work got delayed. The work is being monitored by the Hon' ble Supreme Court since 2002. The Supreme Court formed a committee under the chairmanship of Secretary. MORT&H, and Chairman, Environment Pollution control authority and others as members. The committee submitted a report to terminate the original contract and the Hon'ble Supreme Court ordered to develop separately Manesar to Palwal as a six lane access controlled high way including completion of left out works of the original contractor in all respects before Mar 2016 on 30<sup>th</sup> January 2015. As informed by HSIIDC, ***the court has also ordered that no one can stop the implementation without the knowledge of the court as per the order dt 28<sup>th</sup> November 2014.***

In obedience to the Hon'ble Supreme court order the original contract has been terminated by HSIIDC and the balance work from Manesar to Palwal to upgrade to six lane is entrusted to other agencies and the work has just commenced.

The HSIIDC has approached NBRPB for sanction of financial assistance for the balance works of Manesar - Palwal RD 83/320 to 135/650 km ie 52.33 km length to develop as a six lane including completion of left out works . Balance cost has been worked out to Rs 458 Cr.





## The Project Details

The project is for the balance works of Development of access controlled Kundli Manesar Palwal (KMP) expressway from Manesar to Palwal RD 83/320 to 135/650 km i.e. **52.33 km** at item rate mode. The classification falls under State highway. The stretch starts in Manesar at km 83/320 and ends at Palwal at km 135/650. The project road connects NH-1 at Kundli, crosses NH-10, crosses NH-8 at Manesar and ends at Palwal on NH-2.

The project road has been formed to four lane up to mostly DBM stage and at various stages such as GSB, WMM, DBM 1<sup>st</sup> layer etc. of the entire road length from km83/320 to 135/650. The structures have been constructed for six lane and almost completed except finishing works such as wearing coat, expansion joints, crash barriers etc. The works completed have also faced damage during last four years due to abandonment without any maintenance. The embankment has been informed to have been eroded, the metal has been floated and hence damaged portion needs repairs and restoration.

The upgradation to six lane traffic will cater up to 2024 as per the traffic study. The upgradation to dual two lane ie 4 lane with access controlled highway with the provision of six lane divided highway with full control has been cleared by MOEF during 2007 itself.

### Salient features

- Length of the road is 52.33 km.
- Width of each main carriageway is 11.00m with paved shoulder of 1.5m on each side and unpaved shoulder of 2.0m width on each side.
- Width of median 8.00m
- CBR adopted is 10%
- Design MSA 100

### *Provisions*

The proposals involve:-

- Earthwork for widening to six lane, sub base, base courses.
- Sub base, base and DBM for the left out portion of the original contract.
- DBM for the widened six lane portion and BC for the entire portion.
- Completion of cross drainage works left out works such as wearing coat, expansion joints approach slab, apron etc.
- Completion of fly overs, bridges, and 78 n cross drainage works left out portion
- Toll plaza and interchanges, Rest areas
- Corrective measures for the already completed and abandoned works of the original contractor i.e. repairs and restoration.

Capacity of the road has been designed based on Level of Service (LOS) 'B' corresponding to IRC 64. The geometry of the road has been designed based on IRC 73 with a design speed of 100 km/h (ruling) and 80 (minimum). The design life of the road has been considered as 15 years and flexible pavement has been proposed at toll plazas. All the works will be designed and implemented as per IRC standards.





The land acquisition and R&R have been already completed.

The MoEF clearance had been obtained during 2007 for the main corridor. The HSIIDC shall adhere to the mandatory and statutory laws during implementation and as well as keeping the clearances alive. The tentative costs for ESMs has been included under miscellaneous in the estimate.

The other provisions are:-

- Steps regarding Rain Water Harvesting
- Bus lay byes, , truck lay byes
- Rest areas with water and toilet facilities
- Exploring possibility of solar lighting in the built up area, rest area and junctions.
- Traffic signs and retro reflective markings, guard rails and pedestrian crossing, marking in the built ups and junctions.
- Exploring possibility of plastic roads using waste plastics in the top wearing surface in the selected stretches as far as possible.
- Interception drains
- Turfing the slopes
- Tree plantations 10 times the trees cut.

Time period for construction of the balance works under the project has been considered as 12 months and the works have already been initiated.

### **The Project Cost & Financing**

The cost estimates have been prepared based on IRC/MORT&H rate analysis and DSR of Haryana. The component-wise break up of cost estimate of the project (after appraisal) is as under:

<b>S. No.</b>	<b>Description</b>	<b>Amount (Rs in Cr)</b>
<b>A</b>	Land Acquisition including R&R	Nil
<b>B</b>	<b>Construction Cost</b>	
1	Site clearance and dismantling (Excluding Tree Cutting)	0.02
2	Earth work	53.57
3	Granular base course and Subbase	54.85
4	Bituminous Work	163.45
5	Rigid Pavement	9.90
6	Cross drainage works	1.45
7	Bridges, fly overs (2.35 + 10.85)	12.03
8	Traffic Signs Marking And Other appurtenances	2.37
9	Lined and unlined drains	16.80
10	Pitching and turfing	25.61
11	Crash barriers	31.79
12	Miscellaneous / safety / ESMS	2.03
13	Temporary diversions	7.63
14	Toll plaza and rest areas	30.59



S. No.	Description	Amount (Rs in Cr)
15	Electrical lightings and fittings	7.79
16	Interchanges at chainage 98+ 111	13.82
17	Interchange at 107+803	16.51
	Sub total	450.21
18	Corrective measures for repairs for left out portion	7.60
	Total	457.81

The total estimated cost of the project amounting to Rs. 458 Cr. is proposed to be met as under:

Loan amount from NCRPB	343.35
Govt. of Haryana, HSIIDC Share	114.46

### Drawal Schedule and Sharing Pattern

HSIIDC, Deptt, Haryana is the implementing agency for the Project. The project is proposed to be executed in **12 months** from the issue of sanction letter as per the following financing details:

(Rs. In Cr.)					
I Year	II Loan from NCRPB (75%)	III Contribution from State Govt. (25%)	IV Tenure for Loan	V Moratorium period	VI Phasing of expenditure on works
2015-16	274.68	91.57	10	2	366.25
2016-17	68.67	22.89	9	1	91.56
<b>Total</b>	<b>343.35</b>	<b>114.46</b>			<b>457.81</b>

### Appraisal of DPR

Although the implementation of the project submitted by HSIIDC, Govt. of Haryana is already being overviewed by the Hon'ble Courts, the aspects were also broadly relooked in NCRPB and were found acceptable.

HSIIDC has sought financial assistance for a **part** of Western Peripheral Expressway namely Kundli Manesar Palwal Expressway i.e. the Section / Part starting from Manesar RD 83.320 km to Palwal RD 135.650 km (a **road length of around 53 km stretch**), which has an **estimated cost of Rs. 457.81 Cr.**

HSIIDC has indicated that the works are of urgent nature as Hon'ble Supreme Court of India is monitoring the project. Accordingly, the project is required to be completed during the financial year 2015-16.

The project conceptualized way back in year 2004 based on Supreme Court orders of July 2002, was already under implementation since 2006 with HSIIDC as the project implementation & the steering agency appointed by the State Govt. of Haryana. However, in due course, issues with the contractor have resulted in considerable delay in project



completion and HSIIDC has now been directed vide latest order from Hon'ble Supreme Court dated 30.1.2015 to ensure project completion within a stipulated time. In accordance with the same, the agency is now exploring possibilities for financial assistance to complete the project and has now approached NCRPB for financial assistance for part of its Western Peripheral Expressway.

NCRPB through its Regional Plan has already been propagating the need for Peripheral Expressway. However, in view of the project facing various Court issues, legal opinion was also taken on the matter. Environmental & social issues were also looked into for the project by the concerned experts.

The implementing agency needs to have in place all land records of ownership in favour of HSIIDC pertaining to the project in order to avoid future problems. Further, as the environmental clearance obtained from MoEF in February 2007 has expired, the agency needs to get extension and keep the clearance alive during the construction / implementation period.

The Implementing Agency also needs to explore the possibilities regarding incorporation Rain Water Harvesting mechanisms and other environment improvement measures along the road as a ground water recharging measures which should be made part of all current & future road development schemes.

### **Project Benefits & Justification**

Haryana is one of the key states in NCR having more than 40% NCR area and fast developing regions. Keeping this in view, there is a huge requirement of construction developments in all spheres. The roads, however, are in need of improvement not only for current usage but also to cater to the future needs. Further, as per orders of Hon'ble Supreme Court of India non-destined heavy traffic to Delhi is banned and accordingly, such traffic is to be provided with alternative corridors for movement. Regional Plan 2021 has proposed the Western Peripheral Expressway also known as Kundli Manesar Expressway to be implemented on priority. Therefore, this road which is a significant section of road network in the region is of vital importance for achieving the objective of improving connectivity and accessibility, mobility apart from other social and economic benefits.

### **Point for Decision**

It is proposed that loan assistance of **Rs 343.35 Cr.** for the project for balance works of development of access controlled Kundli Manesar Palwal expressway section Manesar to Palwal RD 83/320 to 135/650 km may be approved as per project details at Appendix-I subject to compliances of aspects indicated below:-

1. Incorporating a safety clause in the loan agreement stating that NCRPB shall not be responsible in any manner for any claim / liability which may arise due to ongoing / future court proceedings or arbitration. In case the Board is made a party to the litigations, the cost of the litigation shall be borne by HSIIDC / Govt. of Haryana.
2. Renewal of Environmental clearance for the project which was obtained in February 2007.



3. HSIIDC to collect all land records of ownership in respect of land acquired to avoid any future problems.
4. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly.

The total estimated cost of the project is **Rs.457.81 Cr.** inclusive of tentative cost related to ESMS compliance. The loan will be released in two installments and will carry an interest rate as applicable for basic infrastructure project on the date of release of installment. The principal along with interest is to be repaid in 10 years with a moratorium period of 2 years for principal. The project is expected to be completed in 1 year from the date of issue of sanction letter. The loan will be subject to HSIIDC / Govt of Haryana making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR. Further, the loan release shall be subject to renewal of Environmental clearance for the project which was obtained in February 2007.



**APPENDIX – I to Agenda 4.1****I. General Particulars**

1	Project	Development of access controlled Kundli Manesar Palwal Expressway section Manesar to Palwal RD 83/320 to 135/650 Balance works
2	Type of project	Infrastructure –Transportation (Up gradation of Roads)
3	Location	The starting km is 83/320 at Manesar , NH 8, and ending at 135/650 at Palwal , NH
4	Borrowing agency	Haryana State Industrial Investment Development Corporation (HSI IDC)
5	Implementing agency	HSI IDC
6	Length	52.33 km
7	Land availability	Informed to be in possession of HSI IDC

**II. Financial features**

8	Estimated total cost of project	Rs. 457.81 Cr
9	Loan from NCRPB	Rs. 343.35 Cr.
10	Interest rate	As applicable at the time of loan disbursement.
11	Provision in State Budget of Principal & interest	To be provided by Govt. of Haryana / HSI IDC in the budget of corresponding financial year.
12	Other sources of funds	HSI IDC / State Govt.
13	Tenure of loan	10 years
14	Provision of State Govt. Guarantee	Adequate security shall be provided by HSI IDC
15	Other Security proposed	Letter of comfort from Govt. of Haryana along with Loan Agreement in case of loan to State Govt.
16	Stipulated date of completion	12 months from the issue of sanction letter

**(Rs. In Cr.)**

<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
<b>Year</b>	<b>Loan from NCRPB (75%)</b>	<b>Contribution from State Govt. (25%)</b>	<b>Tenure for Loan</b>	<b>Moratorium period</b>	<b>Phasing of expenditure on works</b>
2015-16	274.68	91.57	10	2	366.25
2016-17	68.67	22.89	9	1	91.56
<b>Total</b>	<b>343.35</b>	<b>114.46</b>			<b>457.81</b>



**Agenda Item No. 4.2: ROB projects**

- 4.2.A : Construction of 4 lane ROB at Lakhanmajra Meham road at L/C 79 on Delhi Bhatinda Railway line in Rohtak District**
- 4.2.B : Construction of 2 lane ROB at L/C No. 54 on Jind Panipat section (location 66/9-10) crossing road along with Delhi water carrier link channel in Panipat district**
- 4.2.C : Construction of 2 lane ROB at LC No. 55 on Jind Panipat Section Location 67/10-11 over road on Panipat Kabri road in Panipat district**
- 4.2.D : Construction of additional 2 lane ROB at LC no. 3 on Hisar Sadalpur Railway line crossing old DHS at RD 164.60 at Dabra Chowk, Hisar**

**Introduction**

Continuous monitoring of the road and rail line intersections in terms of delays caused to traffic is an important aspect for improving the level of service of road network. As per Indian Railways, the level crossings with more than one lakh TVUs (Tram Vehicle units) need to have ROB/RUBs. Accordingly, PWD (B&R) Haryana has proposed following Road over Bridges (ROBs) which are currently informed to be included in the railway programme:-

- a) Construction of 4 lane ROB at Lakhanmajra Meham road at L/C 79 on Delhi Bhatinda Railway line in Rohtak District
- b) Construction of 2 lane ROB at L/C No. 54 on Jind Panipat section (location 66/9-10) crossing road along with Delhi water carrier link channel in Panipat district
- c) Construction of 2 lane ROB at LC No. 55 on Jind Panipat Section Location 67/10-11 over road on Panipat Kabri road in Panipat district
- d) Construction of additional 2 lane ROB at LC no. 3 on Hisar Sadalpur Railway line crossing old DHS at RD 164.60 at Dabra Chowk, Hisar

At all these crossings the built up area of the town has extended up to the level crossing and the traffic volume is very heavy due to the location of the level crossings within the town. The train traffic data on the four intersections as per the Railway Census and the necessary Railway approvals is as indicated below:-

<b>Level Crossing</b>	<b>Tram Vehicle Units (TVUs)</b>	<b>Railway Correspondence Reference</b>	<b>Approval Administrative Approval</b>
L/C 79 on Delhi Bhatinda	3,99,080 as per November 2011 Railway Census	NRHQE Plan no XEN / BR / (S & D) / 7351 / GAD on cost sharing basis by CBE on	<b>Rs. 25.51 Cr.</b> (vide FC No. 13/8/2011-2 B&R (W) <b>dated 17.8.2011.</b>



Level Crossing	Tram Vehicle Units (TVUs)	Railway Correspondence Reference	Approval Administrative Approval
Railway line in Rohtak District		31.10.2014 and abstract of cost with estimated cost of <b>Rs. 46.26 Cr.</b> as in <b>March 2015. Revised Railway approval on present estimated cost of Rs. 56.04 Cr. awaited.</b>	<b>(Revised administrative approvals on present estimated cost of Rs. 56.04 Cr. awaited)</b>
L/C No. 54 on Jind Panipat section (location 66/9-10) crossing road along with Delhi water carrier link channel in Panipat district	4,45,328 as per April 2015 Railway Census.	As per Railway document, HQ Case No. 260-W/1018/HR/BR(S&D) dated 30.10.2012 and related apportionment of cost of <b>Rs. 29.49 Cr.</b> as in <b>October 2012. Revised Railway approval on present estimated cost of Rs. 25.30 Cr. for PWD works + cost of Railway portion as on date awaited.</b>	<b>Rs. 34.18 Cr.</b> (vide FC No. 13/8/2011-2 B&R (W) dated <b>17.8.2011. (Revised administrative approvals on present estimated cost of Rs. 31.97 Cr. awaited)</b>
LC No. 55 on Jind Panipat Section Location 67/10-11 over road on Panipat Kabri road in Panipat district	2,89,971 as per August 2011 Railway Census justifying 2 lane ROB	Letter No. 385-Acs/ROB-LC-55/JHI-PNP/CSB dated <b>30.06.2015</b> – <b>Estimated Cost - Rs. 29.46 Cr.</b>	<b>Rs. 32.27 Cr.</b> (vide FC No. 13/8/2011-2 B&R (W) dated <b>17.8.2011</b>
LC no. 3 on Hisar Sadalpur Railway line crossing old DHS at RD 164.60 at Dabra Chowk, Hisar	2 lane ROB already existing	2 lane ROB already existed since 1994. Due to heavy traffic additional two lanes proposed.	Administrative approval for Rs. 39.67 Cr. accorded in May 2012 <b>(Revised administrative approvals on present estimated cost of Rs. 74.67 Cr. awaited)</b>

Keeping in view the mixed traffic and severe difficulty encountered by people in these locations and assessing the TVUs much more than the mandatory minimum 1 lakh TVUs necessary to have an ROB/RUB, it has been decided by the Govt. of Haryana as well as Railways authorities to construct the 3 Road Over Bridges (ROBs) on cost sharing basis at the respective level crossings and the additional lanes at LC 3 in Hisar as deposit work.



## Projects Details

The broad technical details of the proposed ROB's are as summarized below:-

Details	a) LC 79 in Rohtak District	b) LC 54 in Panipat	c) LC 55 in Panipat	d) LC 3 in Hisar district
RD of Road	25/ 734 to 26/659 of GLMB road	1.00 of Delhi water carrier channel	0.80km Panipat Kabri road	164/ 600 of old DHS road at Dabra chowk Hissar
RD of railway track	90 / 4 – 5 Of DLI BTL railway track	66 / 9 – 10 of Jind Panipat railway track	67 / 9 – 10 of Panipat Jind track	Hissar Sadalpur railway line
Nearby town	Lakhan Majra and Meham	Panipat	Panipat	Hissar
Railway span or length	65 m	144 m	88. 6 m	41.30 m
Road				
Ramp on stilts	130.20m	400 m	159. 50 m	280.00 m
Ramp on Solids	826.90m	326 m	399.39 m	291.70 m
<b>Total length</b>	957 m	870 m	647.49m	613 m
<b>Service roads with drains</b>	5.50 m service road with drains	3 m with 0.65 m drains	3.50 m with 1.0 m drain	3.75 m service road with drain 0.60 on left of Delhi Hissar road
<b>Typical Cross section</b>	Divided four lane with foot path (1.5m) and median (1.2m)	Two lane	Two lane (7.5 meter) ROB without foot path	Two lane with foot path
<b>Gradient</b>	1 in 40	1 in 30	1 in 30 (Kabri side 1 in 30; Panipat side 1 in 25)	1 in 25 on Delhi and 1 in 30 on Hisar side
<b>Structural arrangement Foundation Substructure Super structure</b>	Piles with pier And 4 no of PSC girders with deck slab	Piles Pier and pier caps with RCC Girders with deck slab	1200 mm piles with Pile cap and circular columns with the balanced cantilever beam supporting 3 Girders and other fixtures	Piles Piers RCC girders with deck slab for 20 m
<b>Pavement Composition GSB WMM DBM BC</b>	230mm 250mm 75mm 40mm	300mm 200mm 100mm 40mm	CBR 5 % 300 mm 250 mm 125 mm 40 mm	300mm 200mm 100mm 40mm





Details	a) LC 79 in Rohtak District	b) LC 54 in Panipat	c) LC 55 in Panipat	d) LC 3 in Hisar district
PCU	16598	16961	12743	96796
Land Acquisition	4.3 acres	-	1165 sqm (0.288 acre)	6364 sqm (1.75 acre)
ESMS Categorization				
Environment	E-2	E-2	E-2	E-2
Social	S-2	S-3	S-2	S-2

### **Project Cost & Financing**

PWD (B&R), Haryana through HSRDC is the implementing agency for all the projects. The works are proposed to be carried out after calling competitive tenders from contractual agencies. The total estimated cost of the 3 ROB projects as approved by the Railway authorities is indicated as follows:-

(Rs. In Cr.)

S.No.	Description	Total Cost
a)	Construction of 4 lane ROB at Lakhanmajra Meham road at L/C 79 on Delhi Bhatinda Railway line in Rohtak District	
	Railway share	15.40
	PWD share	30.86
	Cost as per available Railway approval	46.26
	<b>Current project estimated Cost (on which Railway approval awaited)</b>	<b>56.04</b>
b)	Construction of 2 lane ROB at L/C No. 54 on Jind Panipat section (location 66/9-10) crossing road along with Delhi water carrier link channel in Panipat district	
	Railway share	14.59
	PWD share	14.90
	Cost as per available Railway approval	29.49
	<b>Current project estimated Cost (on which Railway approval awaited)</b>	<b>32.58</b>
c)	Construction of 2 lane ROB at LC No. 55 on Jind Panipat Section Location 67/10-11 over road on Panipat Kabri road in Panipat district	
	Railway share	14.41
	PWD share	15.05
	Cost as per available Railway approval as well as estimated cost	<b>29.46</b>
d)	Construction of additional 2 lane ROB at LC no. 3 on Hisar Sadalpur Railway line crossing old DHS at RD 164.60 at Dabra Chowk, Hisar	
	Railway share	-
	PWD share	74.67
	<b>Total Estimated Cost</b>	<b>74.67</b>

Note: As requisite ESMS reports (IEE & SRP, as applicable) are still to be finalized, the related costs, if over & above, the provisions taken beforehand, shall have to be borne by State Govt. from its own resources.



As per agreement between Railways and PWD (B&R) while the cost of stilt portion, solid filled portion, diversion road shall be shared 50:50, cost of service roads, stair cases, bridge electrification shall be borne by PWD only.

### **Drawal Schedule and Sharing Pattern**

The rates taken in the estimate are based on the MORTH database. The estimated project cost includes provision for shifting of utilities etc. Each of the ROB are proposed to be completed within two years from the date of actual commencement of work. Accordingly, the target date of completion of project can be taken as **two years** from issue of sanction letter, as per the following financing structure:-

- a) Construction of 4 lane ROB at Lakhanmajra Meham road at L/C 79 on Delhi Bhatinda Railway line in Rohtak District

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2015-16	9.26	13.16	10	2	22.42
2016-17	13.89	19.73			33.62
Total	23.15	32.89			<b>56.04</b>

- b) Construction of 2 lane ROB at L/C No. 54 on Jind Panipat section (location 66/9-10) crossing road along with Delhi water carrier link channel in Panipat district

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt. & Railways	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2015-16	4.47	8.56	10	2	13.03
2016-17	6.71	12.84			19.55
Total	11.18	21.40			32.58

- c) Construction of 2 lane ROB at LC No. 55 on Jind Panipat Section Location 67/10-11 over road on Panipat Kabri road in Panipat district

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2015-16	4.52	7.27	10	2	11.79
2016-17	6.77	10.90			17.67
Total	11.29	18.17			29.46



- d) Construction of additional 2 lane ROB at LC no. 3 on Hisar Sadalpur Railway line crossing old DHS at RD 164.60 at Dabra Chowk, Hisar

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2015-16	22.40	7.47	10	2	29.87
2016-17	33.60	11.20			44.80
Total	56.00	18.67			74.67

Abstract of the 4 ROB projects are as enclosed at **Appendix 1A, 1B, 1C & 1D.**

### **Point for Decision**

In case of RoBs wherein the project is approved by Railway authorities and the project cost shared, NCRPB considers the Railway approved estimated cost and cost sharing and provides for loan on the agency share. Accordingly, the loan for the RoBs at LC 79, LC 54 & LC 55 have been arrived at, based on the PWD(B&R) share in the available Railway approved estimated cost sharing amounts. The requisite details regarding Project cost, approvals etc. have been provided by Government of Haryana duly vetted/sanctioned by the Railway authorities.

(Rs. In Cr.)

Level Crossing	Railway Approval Correspondence Reference	Railway Sanctioned Cost and Share		Cost as per available Railway approval	Estimated Cost	Loan from NCRPB
		Railway	PWD (B&R)			
<b>LC 79 in Rohtak District</b>	NRHQE Plan no XEN / BR / (S & D) / 7351 / GAD on cost sharing basis by CBE on 31.10.2014 and abstract of cost with estimated cost of <b>Rs. 46.26 Cr.</b> as in <b>March 2015</b> from Northern Railways.	15.40	30.86	46.26	56.04	23.15 <sup>#</sup>
<b>LC 54 in Panipat</b>	As per Railway document, HQ Case No. 260-W/1018/HR/BR(S&D) dated 30.10.2012 and related apportionment of cost of <b>Rs. 29.49 Cr.</b> as in <b>October 2012. Revised</b>	14.59	14.90	29.49	32.58 (presuming no change in the Railway portion cost as in November 2014)	11.18 <sup>#</sup>



Level Crossing	Railway Approval Correspondence Reference	Railway Sanctioned Cost and Share		Cost as per available Railway approval	Estimated Cost	Loan from NCRPB
	<b>Railway approval on present estimated cost of Rs. 25.30 Cr. for PWD works + cost of Railway portion as on date awaited.</b>					
<b>LC 55 in Panipat</b>	Letter No. 385-Acs/ROB-LC-55/JHI-PNP/CSB dated 30.06.2015	14.41	15.05	29.46	29.46	11.29 <sup>#</sup>
<b>LC 3 in Hisar district</b>	2 lane ROB already existed since 1994. Due to heavy traffic additional two lanes proposed. Work on Railway section to be done as deposit work by Railways.	Nil	74.67	-	74.67	56.00

<sup>#</sup> loans have been calculated based on PWD share in the available Railway approved project estimates

PWD (B&R), Haryana is in process of carrying out the necessary ESMS studies and shall comply with the requirements. As requisite ESMS reports (IEE & SRP, as applicable) are still to be finalized, the related costs, if over & above, the provisions taken beforehand, shall have to be borne by State Govt. from its own resources. The Implementing Agency also needs to explore the possibilities regarding incorporation of Rain Water Harvesting mechanisms and other environment improvement measures along the road as a ground water recharging measures which should be made part of all current & future road development schemes.

The State Govt. of Haryana is seeking loan of 75% of its share from the NCRPB. The loan amounts for the projects scheduled to be released subsequent financial year as per project eligibility, will carry interest rate as applicable on the date of release of loan installment. The principal amount along with interest is to be repaid in 10 years with a moratorium period of 2 years. Accordingly, PSMG-I may sanction respective loan amounts as indicated below:

- Loan amount of **Rs. 23.15 Cr.** for the project of "Construction of 4 lane ROB at Lakhanmajra Meham road at L/C 79 on Delhi Bhatinda Railway line in Rohtak District";
- Loan amount of **Rs. 11.18 Cr.** for the project of "Construction of 2 lane ROB at L/C No. 54 on Jind Panipat section (location 66/9-10) crossing road along with Delhi water carrier link channel in Panipat district";



- Loan amount of **Rs. 11.29 Cr.** for the project “Construction of 2 lane ROB at LC No. 55 on Jind Panipat Section Location 67/10-11 over road on Panipat Kabri road in Panipat district”;
- Loan amount of **Rs. 56.00 Cr.** for the project “Construction of additional 2 lane ROB at LC no. 3 on Hisar Sadalpur Railway line crossing old DHS at RD 164.60 at Dabra Chowk, Hisar”

The target date of completion of project shall be two years from issue of sanction letter. The loan will be subject to Govt of Haryana making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly.

In addition, the loan release for each of the project shall be subject to following, as applicable:-

- Land should be in possession of PWD B&R, Govt of Haryana/HSRDC as per the land records, as applicable
- Revised administrative approvals from Govt. of Haryana on the proposed administrative cost against which loans have been sanctioned.
- Forest clearances, if any.
- The Environment Management Plan (EMP) along with the relevant mitigation measures provided in the ESMS reports will be part of the bid document for implementation during the construction period.
- A Social Impact Assessment identifying all the number of project affected person (PAP) and assessing the impact for all the projects and based on the impacts R&R plan has to be duly abided and taken care of. If there is any increase in fund requirement of R&R then PWD will provide additional funds to implement R&R.



## APPENDIX to Agenda 4.2A

## I. General Particulars

1	Project	<b>Construction of 4 lane ROB at Lakhanmajra Meham road at L/C 79 on Delhi Bhatinda Railway line in Rohtak District</b>
2	Type of project	Road Over Bridge (ROB) Infrastructure
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Justification for project	As per Indian Railways, the level crossings with more than one lakh TVUs (Tram Vehicle units) need to have ROB/RUBs. As the average TVU at level crossing no. 79 at Lakhanmajra Meham road on Delhi Bathinda railway line road - comes to 399080 units, a 4 lane Road over Bridge (ROB) has been proposed here to facilitate free movement of traffic.  There is very heavy traffic volume on the stretch of road because the level crossing is located within the Lakhanmajra town which is one of the industrial towns of Haryana State.
5	Location	Panipat town, Haryana
6	Borrowing agency	Haryana Government
7	Implementing agency	Haryana Govt. through their Public Works, (B&R) Department.
8	Land availability	4.3 acres required

## II. Financial features

9	Estimated cost of projects	Rs. 56.04 Cr.
10	Loan from NCRPB	Rs. 23.15 Cr
11	Interest rate	As applicable on the date of disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Govt. of Haryana in the budget of corresponding financial year.
13	Other sources of funds	Rs. 32.89 Cr. to be contributed by State Govt. & Railway Deptt.
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Not required as loan to be given to State Govt.
16	Other Security proposed	Letter of Comfort from State Govt.
17	Stipulated date of completion	Two years from issue of sanction letter

## III. Financial structure of project

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt .	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2015-16	9.26	13.16	10	2	22.42
2016-17	13.89	19.73			33.62
Total	23.15	32.89			<b>56.04</b>



## APPENDIX to Agenda 4.2B

## I. General Particulars

1	Project	<b>Construction of 2 lane ROB at L/C No. 54 on Jind Panipat section (location 66/9-10) crossing road along with Delhi water carrier link channel in Panipat district</b>
2	Type of project	Road Over Bridge (ROB) Infrastructure
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Justification for project	As per Indian Railways, the level crossings with more than one lakh TVUs (Tram Vehicle units) need to have ROB/RUBs. As the average TVU at level crossing no. 54 on Jind Panipat Railway track - comes to 445328 units, a 2 lane Road over Bridge (ROB) has been proposed here to facilitate free movement of traffic. There is very heavy traffic volume on the stretch of road because the level crossing is located near the Panipat refinery which is one of the industrial towns of Haryana State.
5	Location	Panipat town, Haryana
6	Borrowing agency	Haryana Government
7	Implementing agency	Haryana Govt. through their Public Works, (B&R) Department.
8	Land availability	No land acquisition required

## II. Financial features

9	Estimated total cost of projects	Rs. 32.58 Cr
10	Loan from NCRPB	Rs.11.18 Cr
11	Interest rate	As applicable on the date of disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Govt. of Haryana in the budget of corresponding financial year.
13	Other sources of funds	Rs. 21.40 Cr. to be contributed by State Govt. & Railway Deptt.
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Not required as loan to be given to State Govt.
16	Other Security proposed	Letter of Comfort from State Govt.
17	Stipulated date of completion	Two years from issue of sanction letter

## III. Financial structure of project

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt .	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2015-16	4.47	8.56	10	2	13.03
2016-17	6.71	12.84			19.55
Total	11.18	21.40			32.58





## APPENDIX to Agenda 4.2C

## I. General Particulars

1	Project	<b>Construction of 2 lane ROB at LC No. 55 on Jind Panipat Section Location 67/10-11 over road on Panipat Kabri road in Panipat district</b>
2	Type of project	Road Over Bridge (ROB) Infrastructure
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Justification for project	As per Indian Railways, the level crossings with more than one lakh TVUs (Tram Vehicle units) need to have ROB/RUBs. As the average TVU at level crossing no. 55 on Jind Panipat Railway track - comes to 289971 units, a 2 lane Road over Bridge (ROB) has been proposed here to facilitate free movement of traffic.  There is very heavy traffic volume on the stretch of road because the level crossing is located near the Panipat refinery which is one of the industrial towns of Haryana State.
5	Location	Panipat town, Haryana
6	Borrowing agency	Haryana Government
7	Implementing agency	Haryana Govt. through their Public Works, (B&R) Department.
8	Land availability	0.288 acres required

## II. Financial features

9	Estimated total cost of projects	Rs. 29.46 Cr.
10	Loan from NCRPB	Rs. 11.29 Cr.
11	Interest rate	As applicable on the date of disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Govt. of Haryana in the budget of corresponding financial year.
13	Other sources of funds	Rs. 29.46 Cr. to be contributed by State Govt. & Railway Deptt.
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Not required as loan to be given to State Govt.
16	Other Security proposed	Letter of Comfort from State Govt.
17	Stipulated date of completion	Two years from issue of sanction letter

## III. Financial structure of project

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2015-16	4.52	7.27	10	2	11.79
2016-17	6.77	10.90			17.67
Total	11.29	18.17			29.46





## APPENDIX to Agenda 4.2D

## I. General Particulars

1	Project	<b>Construction of additional 2 lane ROB at LC no. 3 on Hisar Sadalpur Railway line crossing old DHS at RD 164.60 at Dabra Chowk, Hisar</b>
2	Type of project	Road Over Bridge (ROB) Infrastructure
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Justification for project	<p>The traffic volume is 96796 pcu requiring four lane and hence additional 2 lanes proposed.</p> <p>Keeping in view the mixed traffic and severe difficulty encountered by people in this region, it has been decided by the Govt. of Haryana to construct the additional two lane road over bridge (ROB) at this X-ing.</p> <p>The Road over Bridge (ROB) has been proposed to facilitate free movement of traffic at level crossing no LC No 3 on Hissar Sadalpur Railway line</p>
5	Location	Hissar District, Haryana
6	Borrowing agency	Haryana Government
7	Implementing agency	Haryana Govt. through their Public Works, (B&R) Department.
8	Land availability	1.75 acres required

## II. Financial features

9	Estimated total cost of projects	Rs. 74.67 Cr.
10	Loan from NCRPB	Rs. 56.00 Cr.
11	Interest rate	As applicable on the date of disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Govt. of Haryana in the budget of corresponding financial year.
13	Other sources of funds	Rs. 18.67 Cr. to be contributed by State Govt. & Railway Deptt.
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Not required as loan to be given to State Govt.
16	Other Security proposed	Letter of Comfort from State Govt.
17	Stipulated date of completion	Two years from issue of sanction letter

## III. Financial structure of project

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2015-16	22.40	7.47	10	2	29.87
2016-17	33.60	11.20			44.80
Total	56.00	18.67			74.67



**Agenda Item No. 4.3 : Construction of Elevated Road on National Highway No 10 from Chottu ram Chowk to Old bus stand (KM 74.00 to 75.86) in Rohtak city Portion”**

**Introduction**

An efficient transport system is a pre requisite for sustained economic development. It is not only the key infrastructural input for the growth process but also plays a significant role in promoting regional integration. The transport systems also plays an important role for promoting the development of the backward regions and integrating them with the mainstream economy by opening them to trade and investment.

The Transport Plan policies and strategies of the Regional Plan-2021 recommend that accessibility should be provided to all parts of the NCR to promote and support economic development. It further calls for linkages amongst regional centers and also sub-regional centers with efficient transport network for facilitating faster movement of traffic amongst such centers.

Due to increase in the economic activity and consequent load on road transport, the road network in NCR's Haryana sub-region needs improvement in terms of carriageway width, crust thickness, and removal of inherent deficiencies such as acute curves, new construction of roads such as ring roads, bypass elevated corridor etc, NCRPB has been regularly providing financial assistance to Haryana for its road development in the Haryana Sub region.

Accordingly, with a focus on the important town of Rohtak in Haryana, the PWD B&R has proposed the project of “Construction of Elevated Road on National Highway No 10 from Chottu ram Chowk to Old bus stand (KM 74.00 to 75.86).

The PWD B&R Govt of Haryana has approached NCRPB to approve loan assistance for the project involving Construction of Elevated road on National Highways No 10 form Chottu Ram Chowk to Old bus stand (km 74.00 to 75.86) in Rohtak city portion with an estimated cost of Rs 152.83 Cr.

**Project Details**

The Elevated project road is a part of NH 10 starting from old bus stand and ending at Mini secretariat Parking area in Rohtak city limits with the RD as 74/000 to 75/600 km. The project road is an important link of Delhi Hissar Sulemanki road. The project site is much congested area and shops on both sides from Chottu Ram Chowk to Old bus stand causing traffic congestion and frequent accidents. The proposed road shall act as an alternate route to Bhiwani and Hissar and other parts of Haryana.

The project road will be elevated two lane road and with service roads.

**Technical Details**

ROW in built up area                      18 to 22 m.

No land acquisition and no structures acquisition



Carriage way for two lane	7.50 m
Service roads	5.50 m
Width of drain	1.50 m
Foundation``	1200 dia piles with pile cap
Piers and	2.5 dia RCC columns with balanced cantilever beam 89 no and abutments 2 no
Superstructure	
PCC	M 15 concrete
RCC	M 35
PSC	M 45
PSC Girder	23 m and above and 3 Girders
RCC Voided slab	18.0 to 23.0 m
Vertical clearance	5.50 m above finished road level of lower road
	Spans 90 nos of varying spans from 18 to 23 and above according to site condition, lay out pan approved etc.
	75 nos of 23m span, 5 nos of 25m span, and voided slab 10nos
Approaches	RE wall with soil fill
Other fixtures	All other conventional provisions provided
Traffic intensity	28500 to 32000 pcu
Design life	10 years for flexible pavement
CBR	6%
Msa	10
GSB	250mm
WMM	200mm
DBM	125mm
BC	40mm
Speed	40 kmph ( 20 kmph at critical locations )
Terrain	Plain
EIRR	EIRR works out to 21.24% which is higher than the minimum threshold value of 12%, and acceptable

The Improvements are only in the existing alignment and the impacts during the construction will be properly mitigated by the PWD B&R who have assured to follow the ESMS policies of NCRPB. The PWD B&R shall adhere mandatory; and statutory laws during implementation and as well as keeping the clearances alive. The tentative costs for ESMS has been included under miscellaneous in the estimate. The project has been categorized as E-2 regarding environment aspect and S-3 regarding social aspect. The other provisions for enhancement of environmental and social upliftment shall be provided as per site conditions and land availability.

Time period for construction of the project has been considered as **24 months**.

### **The Project Cost & Financing**

The cost estimates have been prepared based on IRC/MORT&H rate analysis and DSR of Haryana. The component-wise break up of cost estimate of the project (after appraisal) is as under:



S. No.	Description	Amount (in Rs Cr)
<b>A</b>	Land Acquisition including R&R	Nil
<b>B</b>	<b>Construction Cost</b>	
1	Bridge on stilts	81.3
2	Approaches with RE wall and soil fill	12.2
3	Service roads with drains	6.7
4	Miscellaneous items for Bridge and approaches	0.3
5	Electrification for fly over	5.0
	Escalator and ramps	5.0
6	Horticulture (including ESMS )	3.0
<b>7</b>	<b>Sub Total</b>	<b>113.5</b>
8	Contingency @ 0.25%	0.3
9	Quality control @ 1%	1.1
	Supervision charges @ 2%	2.3
	Escalation @ 10%	11.4
	Utility shifting Sewer line Temporary diversions	20.7
	Utility shifting Water supply	3.0
	Utility shifting Electric line	0.5
	<b>Grand total of the Project</b>	<b>152.8</b>

The total estimated cost of the project amounting to Rs. 152.83 Cr. is proposed to be met as under:

Loan amount from NCRPB	Rs. 114.62 Cr.
Govt. of Haryana, PWD B&R Share	Rs. 38.21 Cr.

### Drawal Schedule and Sharing Pattern

PWD B&R, Govt of Haryana is the implementing agency for the Project. The project is proposed to be executed in **24 months** from the issue of sanction letter as per the following financing details:

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2015-16	45.85	15.28	10 years	2 years	61.13
2016-17	68.77	22.93			91.70
<b>Total</b>	114.62	38.21			152.83

### Appraisal of DPR

The project report submitted by PWD B&R, Govt. of Haryana has been appraised from technical and financial angle by the sector experts / consultants available in NCRPB. The original report submitted by the PWD B&R Department has been revised based on observation/comments received during appraisal. Final Revised DPR submitted by the



Deptt.) after appraisal process has been found to be technically in order. The project has also been scrutinized from the environmental and R&R point of view. The cost estimates have also been found to be reasonable. The present project is being implemented on item rate mode.

The Implementing Agency also needs to explore the possibilities regarding incorporation Rain Water Harvesting mechanisms and other environment improvement measures along the road as a ground water recharging measures which should be made part of all current & future road development schemes.

As per the details available, the project has been categorized as E-2 regarding environment aspect and S-3 regarding social aspect The Initial Environmental Examination (IEE) Report is under finalization and the agency shall bear the related costs if not already covered in the current estimates.

### **Project Benefits & Justification**

Haryana is one of the key states in NCR having more than 40% NCR area and fast developing regions with having more vehicle population of vehicles and fast developing towns. Keeping this in view, there is a huge requirement of construction developments in all spheres. The roads, however, are in need of improvement not only for current usage but also to cater to the future needs. Therefore, this road which is a significant section of road network in the Rohtak city is of vital importance for achieving the objective of improving connectivity and accessibility, mobility apart from other social and economic benefits.

### **Point for Decision**

It is proposed that loan assistance of **Rs. 114.62 Cr.** for the project of construction of Elevated road on National Highways No 10 from Chottu Ram Chowk to Old bus stand (km 74.00 to 75.86) in Rohtak city portion against estimated cost of **Rs. 152.83 Cr.** may be approved as per project details at Appendix-I subject to compliances listed below. The total estimated cost of the project is Rs. 152.83 Cr inclusive of tentative cost related to ESMS compliance. The loan will be released in two installments and will carry an interest rate as applicable for basic infrastructure project on the date of release of installment. The principal along with interest is to be repaid in 10 years with a moratorium period of 2 years for principal. The project is to be completed in 2 years from date of issue of sanction letter. The loan will be subject to Govt of Haryana making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly. In addition the loan release shall be subject to:-

- Administrative approvals from State Govt. on the project and its estimated cost
- Land should be in possession of PWD B&R, Govt of Haryana/HSRDC as per the land records, as applicable
- MoEF clearances, if any to be obtained
- The Environment Management Plan (EMP) along with the relevant mitigation measures provided in the ESMS reports will be part of the bid document for implementation during the construction period.



## APPENDIX – I to Agenda 4.3

## I. General Particulars

1	Project	Development of construction of Elevated road on National Highways No 10 from Chottu Ram Chowk to Old bus stand ( km 74.00 to 75.86 ) in Rohtak city portion for Estimated cost of Rs 152.83 Cr
2	Type of project	Infrastructure – Transportation ( construction of elevated road )
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Location	The starting km is old bus stand and ending at Chottu Ram Chowk ie 74/000 to 75/6000 km of NH 10 in Rohtak city limit.
5	Borrowing agency	Haryana Government
6	Implementing agency	Haryana State Industrial Investment corporation
7	Length	2.2 km
8	Land availability	Available

## II. Financial features

9	Estimated total cost of project	Rs. 152.83 Cr
10	Loan from NCRPB	Rs. 114.62 Cr
11	Interest rate	As applicable at the time of loan disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Govt. of Haryana in the budget of corresponding financial year.
13	Other sources of funds	Nil
14	Tenure of loan	10 years
15	Provision of State Govt. Guarantee	Not required as loan to be given to State Govt.
16	Other Security proposed	Letter of comfort from Govt. of Haryana along with Loan Agreement.
17	Stipulated date of completion	<b>24 months</b> from the issue of sanction letter

(Rs. In Cr.)

I	II	III	IV	V	VI
Year	Loan from NCRPB	Contribution from State Govt.	Tenure for Loan	Moratorium period	Phasing of expenditure on works
2015-16	45.85	15.28	10 years	2 years	61.13
2016-17	68.77	22.93			91.70
<b>Total</b>	114.62	38.21			152.83



#### **Agenda Item No. 4.4: Improvement of Gurgaon Pataudi Rewari road (SH-26) from km 12.00 to 50.41 in Gurgaon & Rewari districts in the State of Haryana**

##### **Introduction**

The Transport Plan policies and strategies of the Regional Plan-2021 recommend that accessibility should be provided to all parts of the NCR to promote and support economic development. It further calls for linkages amongst regional centers and also sub-regional centers with efficient transport network for facilitating faster movement of traffic amongst such centers.

Due to increase in the economic activity and consequent load on road transport, the road network in the Haryana sub-region of the National Capital Region needs improvement in terms of carriageway width, crust thickness, and removal of inherent deficiencies such as acute curves, new construction of roads such as ring roads, bypass elevated corridor etc, NCRPB has been regularly providing financial assistance to Haryana for its road development in the Haryana Sub region.

The Government of Haryana (GOH) is contemplating to enhance the traffic capacity and safety for efficient transshipment of goods as well as passenger traffic on some of the selected heavily trafficked stretches / corridors of State Highways and some other important state roads. Presently, the Government has decided to convert some of the existing single / two lane highways into two lane with / without paved shoulder / four lane highways to be developed.

Accordingly the PWD B&R has proposed the project of “Improvement of Gurgaon Pataudi Rewari road (SH-26) from km 12.00 to 50.41 in Gurgaon & Rewari districts in the State of Haryana” and approached NCRPB to approve funds for the project with an estimated cost of Rs 354 Cr. The works are to be taken up by Haryana State Roads & Bridges Development Corporation Limited (HSRDC).

##### **Project Details**

The project corridor Gurgaon – Rewari starts at Wazirpur Chowk on SH-26 at km 11.800 in Gurgaon district, traverses through Dhanawas, Bakipur, Khabaspur, Jalampur Chowk, Sampak, Pataudi, Dewalwas, Chhanas, Khor, Gadaipur, Chillar, Chhilawas, Khunbhar, Madhalia before reaching the termination point at Rewari at km 54.400 at the railway ROB approach.

The project starts from the point where the earlier 4 laning of this road terminated. The project end point is the ROB at Rewari, the place known as Durga Colony. This project corridor is a part of SH 26 which connects Gurgaon Pataudi Narnaul and Singhana. The starting point i.e. km 11 + 800 is located between sector 98 and 92 of Gurgaon. There are two railway level crossing along the road at km 36 + 935 and km 49 + 600, the nearest railhead is Rewari. The corridor terminates at Rewari perpendicular at ROB approach, after traversing for **38.6 km**.

The improvement proposal for the proposed widening to the desired configuration system include the provision for the following major items:-





- a) Geometric Improvements
- b) Junction Improvements
- c) Design of Overlay and New Pavement
- d) Surface and Pavement Drainage
- e) Bridge and Culverts
- f) Traffic control and safety measures
- g) Miscellaneous

There are 59 major junctions en-route of mostly T type. These are proposed to be improved typically with provision of adequate turning radius and safety measures.

#### Design Thickness & Composition

Design thickness requirements, for various sub grade CBR and design traffic are computed for construction of new pavement. The 90<sup>th</sup> percentile embankment CBR is 5% and the Sub grade CBR is 8%. Hence, effective CBR is 7% and design MSA as derived from the following tablet is coming out to be 42 MSA.

Total MSA on 4 lane	111		
Per lane MSA (4 lane)	42 (111 / 2 x 0.75)		
Effective CBR 6% (conventional method)			
BC	DBM	WMM	GSB
40	110	250	230

#### Proposed Composition

The CBR for borrow areas selected and recommended for adoption varies from 7.80% to 8.30%. Taking into consideration the results; adequate borrow material is available with CBR of 8% (soaked). Therefore, a minimum 500 mm thick selected soil (tibba sand) sub grade is proposed to be constructed with soaked CBR of 8% or more for new pavement for reconstruction.

Accordingly, new pavement for widening and reconstruction is proposed to be constructed with following composition:-

Pavement layers	Widening	New / Reconstructions
Surface layer	40mm BC + 1110 DBM	40mm BC + 1110 DBM
Base Course	250mm Wet Mix Macadam	250mm Wet Mix Macadam
Sub base Course	250mm granuler drainage	250mm granuler drainage
Sub grade	500mm in tibba sand, CBR>8%	500mm in tibba sand, CBR>8%

Reconstruction of existing pavement is proposed to be treated as given below:-

- Remove existing bituminous layer, reuse in subbase / base and / or recycle or dispose as appropriate.
- Excavate up to sub grade level at locations of severe damage / settlement and reconstruct with selected soil, 8% CBR.
- Shape and compact existing granular layer to form top of subgrade.
- Construct sub base, base course and surfacing layers as per new pavement composition.





Shoulder

Hard shoulder is proposed with the composition of adjoining pavement. For earth shoulder, selected earth fill is proposed over granular sub base layer. For built up areas, earth shoulder / margin of 1.25 – 1.75 m between paved shoulder and lined drain is proposed to be interlocking block paved with 150 mm granular sub base material + 30 mm sand fill + 80 mm thick interlocking block (M-40).

Improvement proposal for culverts & bridges

There are total 10 slab culverts, 5 box culverts, 35 pipe culverts and 14 minor bridges on the existing road. The road width of culverts and minor bridges varies from 8.50 m to 12.50 m. In case of minor bridge one has been replaced and rest of the 13 bridges have been widened. Out of 10 nos. slab culverts 6 nos. are replaced due to the poor condition whereas 4 nos. have been widened. All 35 pipe culverts have been replaced with box culverts. All 5 box culverts constructed in recent past and they have been widened. In addition, 10 nos. of box culverts have been newly proposed. All the structures have been proposed for 18.5m width to match with the roadway width, this width does not include the crash barrier. The improvement proposal envisaged for culverts are as under:

- Reconstruction of all pipe culverts, slab culverts and minor bridges.
- Widening of all culverts failing short of 12m formation width.
- Desilting and clearing of waterway with adequate apron and substructure.

Bus lay-bye

Bus lay bye has been proposed in the form of bus stand / shelter at 15 village locations on either side.

Status of Land

The project involves land acquisition of around 39 Ha. against which necessary action informed to have been initiated by the agency.

Project Cost & Financing

PWD (B&R), Haryana through HSRDC is the implementing agency for both the projects. The component-wise break up of cost estimate for each of the project is as presented below:-

S. No	Description	Amount (Rs. in Cr.)
1	Site Clearance	0.39
2	Earthwork	18.20
3	Sub base & Base Course	26.23
4	Bituminous Course	80.75
5	Cement Concrete Pavement	5.38
6	Drainage and Cross Drainage works	20.12
7	Traffic safety & Road Furniture	5.23
8	Miscellaneous	1.63
9	Proposed additional two lanes at LC 48	35.00
<b>A</b>	<b>Total</b>	<b>192.93</b>



S. No	Description	Amount (Rs. in Cr.)
B	Add 1% for preparation of DPR including surveying, geotechnical investigation, design, drawing & proof checking	1.93
C	<b>Total (A + B)</b>	194.86
D	Contingency charges @ 0.25 % on C	0.49
E	Quality Control Charges @ 1% on C	1.95
F	Supervision Charges @ 2% on C	3.90
G	Total (C+D+E+F)	201.19
H	Provision for Shifting of Electric Pole, Electric Line and PH Utilities and Tree Plantation	10.00
I	<b>Total (G+H)</b>	211.19
J	40% Financial Progress in First Year	84.48
K	60% Financial Progress in Second Year with escalation @ 6%	134.32
L	Land acquisition and R&R Cost	135.00
	<b>Total Cost (J+K+L)</b>	353.80

**Say Rs. 354 Cr.**

The total revised estimated cost of the project amounting to Rs. 354 Cr. is proposed to be met as under:-

Loan amount from NCRPB @ 75%	Rs. 265.50 Cr.
Govt. of Haryana, PWD (B&R), Haryana Share @25%	Rs 88.50 Cr.

### **Drawal Schedule and Sharing Pattern**

The target duration of completion for all the projects has been taken as 24 months from the date of issue of revised loan sanction letter. PWD (B&R) Haryana shall be implementing the project through financial assistance from NCRPB as per the following phasing & schedule:-

(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure of Loan	Moratorium period	Phasing of expenditure
2015-16	106.20	35.40	10	2	141.60
2016-17	159.30	53.10	9	1	212.40
<b>Total</b>	265.50	88.50			354.00

### **Appraisal of DPR**

Technical, financial, environmental & social appraisal of the project reports have been done by sector experts / consultants available in NCRPB. The original reports submitted by the PWD (B&R), Haryana have been revised based on the additional 2 lanes on a 2 lane ROB at LC 48 suggested to have a continuous 4 lane stretch. Final Revised DPRs submitted by the PWD (B&R), Haryana have been found to be in order. The cost of additional 2 lane has been tentatively considered and the details have to be worked out by the agency. The cost estimates have also been found to be reasonable. As no tolls are proposed to be levied, the O&M expenses have to be met out of the PWD's budget only. Special attention is to be given



to functionality of the drain being provided as they are often found choked with little maintenance after construction / civil works.

The environmental examination report and social resettlement report are yet to be prepared and the agency shall bear the related costs if not already covered in the current estimates. However, as per the details available, the project most probably shall be categorized as E-2 regarding environment aspect and S-2 regarding social aspect

### **Project Benefits & Justification**

Haryana is one of the key states in NCR having more than 40% NCR area and fast developing regions with having more vehicle population of vehicles and fast developing towns. Keeping this in view, there is a huge requirement of construction developments in all spheres. The roads, however, are in need of improvement not only for current usage but also to cater to the future needs. Therefore, this road which is a significant section of road network in the Gurgaon district is of vital importance for achieving the objective of improving connectivity and accessibility, mobility apart from other social and economic benefits.

### **Point for Decision**

It is proposed that loan assistance of **Rs. 265.50 Cr.** for the project – Improvement of Gurgaon Pataudi Rewari road (SH-26) from km 12.00 to 50.41 in Gurgaon & Rewari districts in the State of Haryana against estimated cost of **Rs. 354 Cr.** may be approved as per project details at Appendix-I subject to compliances listed below. The loan will carry an interest rate as applicable for basic infrastructure project on the date of release of installment. The principal along with interest is to be repaid in 10 years with a moratorium period of 2 years for principal. The project is to be completed in 2 years from date of issue of sanction letter. The loan will be subject to Govt of Haryana making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly. In addition the loan release shall be subject to:-

- Administrative approvals from Government of Haryana on the project and its estimated cost
- Land should be in possession of PWD B&R, Govt of Haryana/HSRDC as per land records
- MoEF clearances, if any to be obtained
- The Environment Management Plan (EMP) along with the relevant mitigation measures provided in the ESMS reports will be part of the bid document for implementation during the construction period.
- A Social Impact Assessment identifying all the number of project affected person (PAP) and assessing the impact for all the projects and based on the impacts R&R plan has to be duly abided and taken care of. If there is any increase in fund requirement of R&R then PWD will provide additional funds to implement R&R.



## APPENDIX-I to Agenda 4.4

## I. General Particulars

1	Project	<b>Improvement of Gurgaon Pataudi Rewari road (SH-26) from km 12.00 to 50.41 in Gurgaon &amp; Rewari districts in the State of Haryana</b>
2	Type of project	Infrastructure–Transportation (Upgradation of Roads)
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Location	The project starts from the point where the earlier 4 laning of this road terminated. The project end point is the ROB at Rewari, the place known as Durga Colony. This project corridor is a part of SH 26 which connects Gurgaon Pataudi Narnaul and Singhana.
5	Borrowing agency	Haryana Government
6	Implementing agency	PWD (B&R), Haryana
7	Length	38.6 km
8	Land availability & land acquisition	Land Acquisition involved (approximately 39 Ha.)

## II. Financial Particulars

9	Estimated total cost of project	Rs. 354 Cr.
10	Loan from NCRPB	Rs. 265.50 Cr.
11	Interest rate	As applicable at the time of loan disbursement.
12	Provision in State Budget of Principal & interest	To be provided by Govt. of Haryana in the budget of corresponding financial year.
13	State Government of Haryana funds	Rs. 88.50 Cr.
14	Tenure of loan	10 years with 2 year Moratorium period for payment of principal
15	Provision of State Govt. Guarantee	Not required as loan is to be given to State Govt.
16	Other Security proposed	Letter of comfort from Govt. of Haryana along with Loan Agreement.
17	Stipulated date of completion	24 months from the issue of sanction letter

Rs. in Cr.

Year	Loan from NCRPB	Contribution from State Govt.	Tenure of Loan	Moratorium period	Phasing of expenditure
2015-16	106.20	35.40	10	2	141.60
2016-17	159.30	53.10	9	1	212.40
<b>Total</b>	<b>265.50</b>	<b>88.50</b>			<b>354.00</b>



## Agenda No. 4.5 : Development of Six lane Elevated Road (Hindon) in Ghaziabad, Uttar Pradesh by GDA

### Introduction

The Transport Plan policies and strategies of the Regional Plan-2021 recommend that accessibility should be provided to all parts of the NCR to promote and support economic development. It further calls for linkages amongst regional centers and also sub-regional centers with efficient transport network for facilitating faster movement of traffic amongst such centers.

Due to increase in the economic activity and consequent load on road transport, the road network in the National Capital Region needs improvement in terms of carriageway width, crust thickness, and removal of inherent deficiencies such as acute curves, new construction of roads such as ring roads, bypass elevated corridor etc, NCRPB has been regularly providing financial assistance to constituent state governments and its parastatals for road development in the region.

Ghaziabad Development Authority is contemplating to enhance the traffic capacity and safety for efficient movement of goods as well as passenger traffic on some of the selected heavily trafficked stretches / corridors of State Highways and some other important state roads.

Accordingly the GDA has proposed the project of “Development of Six lane Elevated Road (Hindon) in Ghaziabad, Uttar Pradesh by GDA” and approached NCRPB to approve funds for the project having an estimated cost of Rs 1142 Cr. The area expected to experience development through this project is the span between Eastern Peripheral Expressway, Northern Peripheral road of GDA connecting NH-24 and NH-58, which is lying disjointed due to the Hindon Air Base Station.

GDA intends to have a self-sustained Urban Settlement developed in the area which is duly connected to adjacent urban areas through express traffic corridors.

### Project Proposal & Details

While the Hindon Elevated Road is proposed to start from NH-24 (bye-pass) and terminate after crossing proposed Northern Peripheral Road, the part of the road in Rajnagar extension area shall be surface road but **is not part of the current project**. The complete project road is a green field project and shall have an overall length of 17.300 km. The proposed Hindon Elevated road will be having 6 lanes and project road shall start at NH 24 near Hindon cut with one interchange proposed at NH 24 for the traffic entering from Delhi to Raj Nagar Extension Area.

Out of 17.30 km. of project road, 10.30 km. is elevated (Part-A) & 7.00 km (Part-B) is at grade road. Up ramp & down ramp towards Raj Nagar Extension have been proposed at crossing with Mohan Nagar link road (Kanawani). Project road crosses railway line, GT road, proposed metro line (Dilshad Garden to- Ghaziabad) & Hindon river.



Salient Features (Part-A)

Start point of project road	NH 24 at Hindon Cut
End point of project road	At km 10.30
Length	10.00 km
Configuration	6 lane elevated
Land use	Agriculture / built up / green land
Interchange	Two a) At NH 24 at km 0+000 b) At Kanavani at km 5+000
Roundabouts	At km 10+300
Underpass	Nil
Major Crossing	a) Railway line crossing (at km 7+600) b) GT Road Crossing (at km 8+300) and above the Metro Line

The alignment has the approval of GDA Board. While present proposal covers the Part-A (10.3 km which is elevated in nature), GDA proposes to construct the balance 7 km at grade portion as Part-B, later on in second stage. As at present there is no existing road corresponding to Part-B, hence, the Part-B alignment of 7 km is also proposed to be a green field alignment to be developed at later stage.

Out of total project length of 10.3 km. for Part-A being taken up in the first stage, land for 9.30 km. length is available from Irrigation Department while land for balance 1 km stretch is to be purchased from private land owners, process regarding which has been informed to be already initiated.

Land Acquisition

The total land area to be acquired is about 3.25 hectare. There is no structure in the alignment of the elevated road. About 95% of the land is informed to be falling under Irrigation Department and as available. The balance land (for 1 km. road stretch) is proposed to be purchased by GDA through direct negotiations.

As informed by GDA, the necessary No Objection Certificate (NOC) have been acquired from Irrigation Authorities, Ministry of Road Transport & Highways and Railways.

Regarding ROW, the project shall involve an elevated road having 24.5m formation width including six lanes of 3.5m width, 0.5m kerbstone and crash barrier on either side and a median of 1.5m. In addition, the ramp at NH-24 shall have a 12m formation width including 3 lanes of 3.5m width and 0.5m kerbstone and crash barrier on either side. The ramp proposed at Mohan Nagar link road crossing at Kanavani shall have 8.5m formation width including 2 lanes of 3.5m width and 0.5m kerbstone and crash barrier on either side.

Project Cost & Financing

GDA is the implementing agency for the project. The component-wise break up of cost estimate for the project is as presented below:-



S. No	Description	Amount (Rs. in Cr.)
1	Site Clearance	0.02
2	Earthworks	4.47
3	Sub base & Base Course	3.98
4	Bituminous Course	15.09
5	Junctions	2.94
6	New Bridges, ROBs and Underpasses	820.12
7	Drainage and Cross Drainage works	2.80
8	Traffic signs, markings & Road Appurtenances	1.68
9	Miscellaneous	7.45
10	5 year maintenance cost @ 10 lacs/km/year	5.08
<b>A</b>	<b>Total Construction Cost (1 to 10)</b>	<b>863.63</b>
11	Labour Cess @ 1% on A	8.64
<b>B</b>	<b>Sub total (A+11)</b>	<b>872.26</b>
12	Contingency, IDC, Escalation & Other Cost @ 25 % on B	215.91
<b>C</b>	<b>Total Civil Cost (B+12)</b>	<b>1088.17</b>
13	Utility Shifting	4.00
14	Land acquisition cost payable to Irrigation Department & Private Owners	50.00
15	Environmental & Social Cost	0.30
<b>D</b>	<b>Total Non Civil Cost (13+14+15)</b>	<b>54.30</b>
<b>F</b>	<b>Total Project Cost*</b>	<b>1142.47</b>

\* While the estimates were pre-tendering, GDA has now informed that the civil works have since been awarded on EPC mode under the guidelines and bidding documents approved by Planning Commission, GOI through MORTH in October 2014 and cost of tender is Rs. **916.92 Cr.** (excluding cost related to utility shifting, land acquisition, ESMS, contingency, escalation etc.) and the revised cost now comes to Rs. **1147.60 Cr.**

The total revised estimated cost of the project amounting to Rs. 1147.60 Cr. is proposed to be met as under:-

Loan amount from NCRPB	Rs 700 Cr.
GDA Share	Rs 447.60 Cr.
<b>Total</b>	<b>Rs. 1147.60 Cr.</b>

### **Drawal Schedule and Sharing Pattern**

The target duration of completion for the project has been taken as upto April 2017. Ghaziabad Development Authority (GDA) is implementing the project through financial assistance from NCRPB as per the following phasing & schedule:-





(Rs. In Cr.)

Year	Loan from NCRPB	Contribution from State Govt.	Tenure of Loan	Moratorium period	Phasing of expenditure
2015-16	210.00	134.28	10	2	344.28
2016-17	210.00	134.28	9	1	344.28
2017-18	280.00	179.04	8		459.04
<b>Total</b>	<b>700.00</b>	<b>447.60</b>			<b>1147.60</b>

### **Projects Benefits & Justification**

By way of giving a through way to Highway traffic, the project road when in operation is expected to help in substantial decrease, if not avoiding the use of internal city road for highway traffic destined from NH-24 to NH-58 and vice-versa. The project shall also help in further developing the Raj Nagar extension area.

Major benefits from the projects are:-

Reduction in travel time –Currently, the average travel speed of vehicle between UP gate to Hindon bridge is 20 kmph (approx.) and there are 5-6 junctions in between leading to an approximated total travel time taken by vehicle to be 40 min – 50 min. After construction of elevated road travel time is expected by GDA to come down to about 10min – 15 min.

Reduction in Vehicle Operating Cost (VOC) – although not quantified, GDA claims that as Vehicle Operation Cost is arrived at due to many factors like fuel consumption, riding comfort, wear and tear of vehicle parts, travel time and safety of the passengers, the project shall help in significant reduction in these factors and hence, achieving an overall reduction in the VOC.

### **Appraisal of DPR**

Technical, financial, environmental & social appraisal of the project report has been done by the Sector experts/ Consultants available at NCRPB. Requisite traffic analysis was got redone and the DPR revised accordingly.

The original report submitted by the GDA had to be revised to incorporate a more extensive traffic study than was initially considered, to properly justify the project need. Final Revised Reports submitted by the authority can be considered as acceptable provided the assurances required with regard to network improvements as per Master Plan and the necessary incorporation of elevated road in the plan, etc. are made. The cost estimates have also been found to be reasonable. The O&M expenses have to be met out of the GDA's budget only.

While the project has been categorized as E-2 and S-2 regarding environmental and social aspects, necessary Initial Environmental Examination (IEE) Report and Social Resettlement Report (SRP) need to be prepared. Accordingly, the required action as mandated under them need to be undertaken. As the related costs have not been arrived at still, the costs as applicable over and above the estimates included currently, shall be borne by GDA.





### **Point for Decision**

It is proposed that loan assistance of **Rs. 700 Cr.** for the project - Development of Six lane Elevated Road (Hindon) in Ghaziabad, Uttar Pradesh by GDA against estimated cost of **Rs. 1147.60 Cr** may be approved as per project details at Appendix-I subject to compliances listed below.

- Appropriate updation be done in the GDA Master Plan so that the elevated road does not appear to be a project not being part of the approved developing plans. The current Master Plan specifies a 45m wide at grade road with access to adjacent parts of the city and the provision of 25m wide access controlled elevated road does not fulfil this requirement.
- Clear implementation schedule, programme and timeline for Part-A & Part-B scheduled to be taken at different stages along with the initiation of necessary process of land acquisition for the 7 km. at grade portion scheduled to be taken up Part-B with advance action as the success of the elevated road rests on having a complete road stretch development.
- Clear design & construction programme of the Master Plan proposed for North Peripheral Road (part of programme since more than a decade but no action taken) along with the Elevated Road associated at grade section.
- Ensure integration of the existing road network with the proposed road to facilitate efficient use of the created capital intensive infrastructure.
- Have proper institutional operation and maintenance set up for the project road (both stages).
- Solutions need to be looked into to provide connectivity with the Eastern part of the city.
- The proper round about need to be designed and taken up at the North end of the elevated section and the authority needs to look into the possibility of having an interchange at this point.

The total estimated cost of the project is **Rs. 1147.60 Cr.** inclusive of tentative cost related to ESMS compliance. The loan will be released in three installments and will carry an interest rate as applicable for priority infrastructure project on the date of release of installment. The principal along with interest is to be repaid in 10 years with a moratorium period of 2 years for principal. The project is expected to be completed by April 2017. The loan will be subject to GDA making suitable budgetary provisions in the Annual Budgets and also undertaking to complete the project as per approved DPR. Any cost increase over and above, the current estimates, shall be borne by the agency from its own sources and all efforts to complete the project be ensured accordingly. In addition the loan release shall be subject to:-

- Land should be in possession of GDA as per land records
- MoEF clearances, if any to be obtained
- Submission and approval of the IEE and SRP reports for the project and assurances from GDA that necessary action as mandated in the resulting Environment Management Plan (EMP) along with the relevant mitigation measures provided in the ESMS reports will be undertaken and implemented under intimation to NCRPB.
- An SRP report with necessary Social Impact Assessment identifying all the number of project affected person (PAP) and assessing the impact for all the projects and based on the impacts R&R plan has to be duly abided and taken care of. If there is any increase in fund requirement of R&R then GDA will provide additional funds to implement R&R.



## APPENDIX I to Agenda 4.5

## I. General Particulars

1	Project	<b>Development of Six lane Elevated Road (Hindon) in Ghaziabad, Uttar Pradesh by GDA</b>
2	Type of project	Infrastructure – Transportation (Up gradation of Roads)
3	Whether a project at the same location has been earlier financed by NCRPB	No
4	Location	The Hindon Elevated Road is proposed to start from NH-24 (bye-pass) and terminate after crossing proposed Northern Peripheral Road.
5	Borrowing agency	Ghaziabad Development Authority
6	Implementing agency	Ghaziabad Development Authority
7	Length	10.30 km.
8	Land availability & land acquisition	Land Acquisition of around 3.25 hectare involved

## II. Financial Particulars

9	Estimated total cost of project	Rs. 1147.60 Cr.
10	Loan from NCRPB	Rs 700 Cr.
11	Interest rate	As applicable at the time of loan disbursement.
12	Provision in State Budget of Principal & interest	To be provided by GDA in the budget of corresponding financial year.
13	State Government / Implementing Agency funds	Rs. 447.60 Cr.
14	Tenure of loan	10 years with 2 year Moratorium period for payment of principal
15	Provision of State Govt. Guarantee	Adequate security shall be provided by GDA
16	Other Security proposed	Letter of comfort from Govt. of Uttar Pradesh along with Loan Agreement in case loan to State Govt.
17	Stipulated date of completion	April 2017

Rs. in Cr.

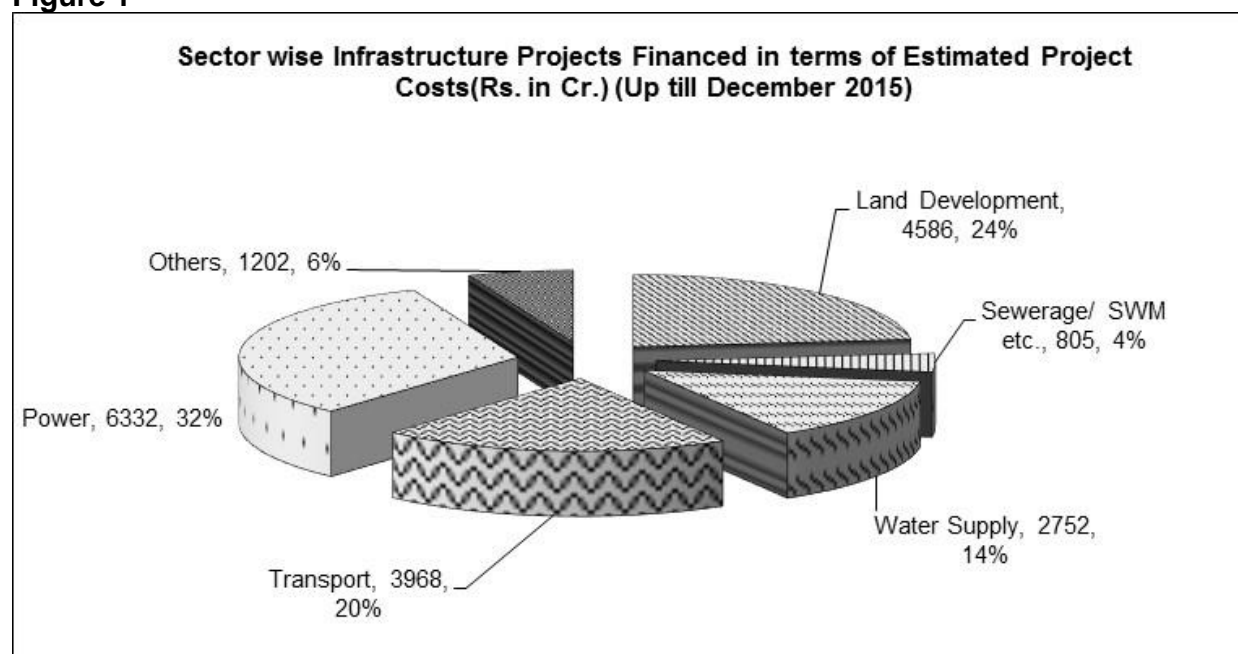
Year	Loan from NCRPB	Contribution from State Govt.	Tenure of Loan	Moratorium period	Phasing of expenditure
2015-16	210.00	134.28	10	2	344.28
2016-17	210.00	134.28	9	1	344.28
2017-18	280.00	179.04	8	1	459.04
<b>Total</b>	<b>700.00</b>	<b>447.60</b>			<b>1147.60</b>



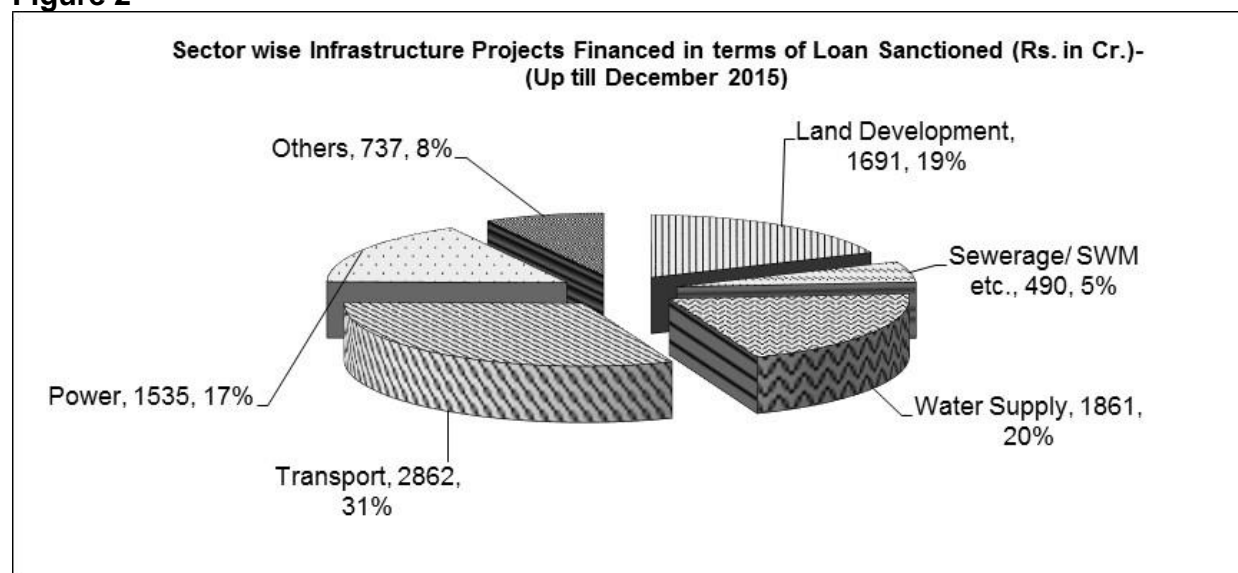
### Agenda Item No. 5: Review of Projects financed by the NCR Planning Board

As on date, the Board has provided financial assistance to **286** infrastructure development projects with an estimated cost of Rs. **19,647** Crore, out of which an amount of Rs. **9,176** Crore has been sanctioned as loan. The Board has released a loan amount of Rs. **7,161** Crore till December 2015. The sector wise break up of estimated cost of projects and the loans sanctioned by the NCRPB are shown in Figure 1 and Figure 2 below, respectively.

**Figure 1**



**Figure 2**



Out of **286** projects for which loans have been sanctioned by the Board, **232** projects have been completed and balance **54** are at various stages of implementation. State-wise analysis of **54** ongoing projects is as under:-

Project Description	Haryana	Uttar Pradesh	Rajasthan	Delhi	Punjab	Madhya Pradesh	Total
<b>Delayed</b>							
Delayed > 1 Year	6	-	-	-	-	-	<b>6</b>
Delayed from 6-12 Months	-	-	-	-	-	-	<b>-</b>
Delayed < 6 Months	3	-	-	-	-	-	<b>3</b>
<b>Ongoing Within Sanctioned Time</b>	12	5	5	-	-	1	<b>23</b>
<b>Reported Completed</b>							
Completion Certificate Received	12	1	1	-	1	-	<b>15</b>
Completion Certificate/ Clarification Awaited	2	2	-	-	-	1	<b>5</b>
Withdrawn	-	-	-	-	-	-	<b>-</b>
<b>Nonstarter</b>	-	-	1	1	-	-	<b>2</b>
<b>Total</b>	<b>35</b>	<b>8</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>54</b>

- **6** projects from the ongoing list of projects have been delayed by more than one year from the original date of completion (refer **Appendix-I**). Out of these, **5** projects have sought fresh extensions for another 6-9 months.
- **15** of the ongoing projects have been reported as completed and Completion Certificates received (List at **Appendix-II**). Another **5** have though reported completed / foreclosed but are yet to submit the necessary Completion Certificates (List at **Appendix-III**).
- One **(1)** bus shelter project from UIT Alwar and one **(1)** office building project from EDMC have been a Non-Starter despite loans sanctions in December 2012 & December 2013 and subsequent release of first installment in July 2013 & September 2014 respectively.

### **Point for Decision**

- Agencies need to adhere the project completion schedules. The Board should be kept apprised with regard to the delays and the reasons thereof and necessary action that is being taken to avoid further delays.
- Agencies who foresee delays in project completion need to make the necessary extension request with appropriate justification in a timely manner.
- **15** projects that have been reported completed and completion certificates received since last PSMG may be shifted to List of Completed projects.
- The Solar bus shelter project of UIT Alwar is a Non Starter even after sanction of loan in December 2012 and the release of Rs. 2.00 Cr in July 2013. The loan released may be recalled and the project may be treated as dropped from the list of ongoing projects.
- EDMC need to ascertain regarding intent to take up the project as no action is being seen on ground even after even after 2 years of loan approvals.
- The respective agencies need to expedite submission of the completion certificates and related clarifications for the projects that have been reported completed pending submission of completion certificates. They may ensure that the assets proposed under the project have been actually created and are functional on ground as envisaged.



## Appendix-I

**Ongoing Projects - ongoing but delayed by more than a year from original/revised date of completion**

Project Description	Haryana	Total
Delayed more than 1 Year	6	6

(Rs. in Cr)

S.No.	Name of the Projects	Type of Project	Implementing Agency	Date of sanction	Original completion Date / revised date	Estimated cost	Loan Sanctioned	Loan released	Reported Expenditure
	<b>Haryana Sub region</b>								
1.	Water Suply at Sohna Town & Rojka Meo Industrial Area,Sohna*	Water supply	PHED	Nov-08	Dec-11/ Dec-12/ Dec-14/ Sep-15	65.34	24.50	24.50	65.84
2.	Water Supply scheme for Nalhar Medical College and Nuh Town	Water supply	PHED	Aug-11/ May-15	Jul-14	150.00	112.50	68.13	49.37
3.	Development of Sewerage System and Construction of two STPs at Rohtak town*	Sewerage	PHED	Feb-06	Feb-09/ Feb-10/ Mar-11/ Dec-14/ Sep-15	44.25	33.20	33.20	58.99
4.	Providing sewerage scheme and treatment plant for Pataudi , Gurgaon District*	Sewerage	PHED	Aug-11	Jul-14/ Sep-15	14.50	10.87	8.27	13.13
5.	Providing sewerage scheme for Punhana Town in Mewat Distt*	Sewerage	PHED	Aug-11	Jul-14/ Sep-15	12.50	9.37	7.73	9.82
6.	Providing sewerage scheme and treatment plant for Hathin Town, Palwal District*	Sewerage	PHED	Aug-11	Jul-14/ Sep-15	12.30	9.23	8.00	10.06

\* Fresh extensions requested and taken up separately.



## Appendix-II

**Projects Reported Completed & Completion Certificate Received**

Following projects have been reported completed through completion certificates by respective agencies:-

Project Description	Uttar Pradesh	Haryana	CMA Patiala	Rajasthan	Total
Completion Certificate Received	1	12	1	1	15

(Rs. in Cr.)

S.No.	Name of the Projects	Implementing Agency	Date of sanction	Final Completion Cost
	<b>Uttar Pradesh</b>			
1.	Anand Vihar Housing Scheme at Hapur*	HPDA	Dec-07	214.78
	<b>Haryana</b>			
2.	Providing sewerage scheme and treatment plant for Nuh Town, Mewat District	PHED	Aug-11	10.27
3.	Augmentation of rural drinking water supply for Mewat region, Haryana	PHED	Nov 04 and Nov 09	300.49
4.	Providing Water Supply Scheme for Samalkha town Distt. Panipat. *	PHED	Aug-11	11.52
5.	Providing sewerage scheme and Treatment Plant for Gohana Town District Sonipat *	PHED	Jun-09	19.32
6.	Improvement & Upgradation of Sub transmission of distribution network in Hisar**	DHBVN	Nov-08	37.88
7.	Scheme for HVDS/LVDS & Reallocation of meters under DHBVN in NCR area**	DHBVN	Nov-08	131.03
8.	Project for creating power infrastructure in Haryana subregion of NCR	HVPN	Aug-07	112.98
9.	New construction of roads from Kaluka to NH-8, Sheoraj Majra to Sangwari, Barriawas to NH-8, Rojka to Asadpur, Bikaner to Gurukawas, Rewari Jhajjar road to Rewari Narnaul road via Rewari Dadri road	PWD (B&R)	Nov-08	26.48
10.	Construction of By-pass at Chhara, in Jhajjar District of Haryana	PWD (B&R)	Dec-12	34.16
11.	Construction of By-Pass at Kosli in Rewari district, Haryana	PWD (B&R)	Dec-12	22.14



S.No.	Name of the Projects	Implementing Agency	Date of sanction	Final Completion Cost
12.	Improvement of 5 Roads in Gurgaon Distt.(31.65km)	PWD (B&R)	Nov-09	65.08
13.	Construction of 2 lane ROB at Panipat Jatal road on Delhi Ambala railway line at L/C No. 52-C in Panipat District	PWD (B&R)	Dec-12	32.08
	<b>CMA Patiala</b>			
14.	Extension & Augmentation of Water Supply, Sewerage & Solid Waste Mgmt, Patiala	Patiala Urban Planning & Development Authority (PDA)	Sep-02	59.93
	<b>Rajasthan (CMA Kota)</b>			
15.	Augmentation of Water Supply in Kota	UIT Kota	Aug-11	144.74

\* Balance loan release under process

\*\* Fore-closed due to land issues. Balance works to be completed by agency from own funds





## Appendix-III

**Projects Reported Completed but Completion Certificate Awaited**

Following projects have been reported as completed by the agencies but the completion certificates are still awaited. The details are as follows:-

Project Description	Haryana	Uttar Pradesh	SADA Gwalior	Total
Completion Certificate/Clarification Awaited	2	2	1	5

(Rs. in Cr)

S. No.	Name of the Projects	Type of Project	Implementing Agency	Date of sanction	Original / Revised Date of completion	Estimated cost	Loan Sanctioned	Loan released
	<b>Haryana</b>							
1.	Establishment of Technical Institutions at Rohtak	Social	DTE	May-10	Mar-12/ Mar-14	197.00	67.50	67.50
2.	Scheme for strengthening power infrastructure in NCR area of Haryana – Augmentation of Transmission Works	Power	HVPN	Nov-08	Nov-09/ Sep-12 / Mar-14	79.43	59.58	59.58
	<b>Uttar Pradesh</b>							
3.	Ganga Nagar residential scheme, Bulandshahr*	LD	BKDA	Nov 04/ May 10	May-08/ Mar-09/ Mar-13	69.14	48.09	35.09
4.	Transport Nagar Scheme, Bulandshahr**	Transport	BKDA	Nov-04	Mar-08/ Mar-09	33.71	20.65	17.79
	<b>SADA Gwalior</b>							
5.	Infrastructure Development of Residential Schemes	LD	SADA, Gwalior	NOV 09	Dec-11/ Jun-14/ Sep-15	76.07	42.05	31.54

\* Reported foreclosed indicating no more loan required. Balance works to be taken up from own sources on availability of land

\*\* Persistent land issues have led to little action on ground apart from land acquisition. Agency request for foreclosure indicating no more loan required and assuring works to be taken up from own sources





**Agenda Item No. 5.1: Request for extensions of completion dates of projects**

Request for extension of completion dates for 7 ongoing projects were made by PHED, Haryana. These include 2 water supply & 5 sewerage sector projects as per details below:-

S. No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Requested revised date of completion	Reasons given for delay
1.	Water Supply at Sohna Town & Rojka Meo Industrial Area, Sohna	65.34	Nov-08	Dec-11/ Dec-12 / Dec-14/ Sep-15	Mar-16	Delay in obtaining permission from Forest Department and land acquisition thus resulting in delay in laying of rising main.
2.	Augmentation of Water Supply for Farrukh Nagar Town & Five Villages, Gurgaon District.	13.90	Nov-11/ May-15	Feb-16	Jul-16	The work put on hold in the narrow streets of the town as water supply line will be laid after laying of sewer line.
3.	Development of Sewerage System and Construction of two STPs at Rohtak town.	44.25	Feb-06	Feb-09/ Feb-10/ Mar-11/ Dec-14/ Sep-15	Mar-16	The 40 MLD STP partially commissioned. Balance work is in progress.
4.	Providing sewerage facilities in village kosli, Bhakli and Railway station area of Kosli, Dist. Rewari	8.70	Oct-07	Oct-10/ Mar-12/ Aug-13/ Sep-14/ Dec-15	Jun-16	Due to delay in permission of railway and B&R Deptt. Now both the permissions have been received and work is in progress.



S. No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Requested revised date of completion	Reasons given for delay
5.	Providing sewerage scheme and treatment plant for Pataudi, Gurgaon District	14.50	Aug-11	Jul-14/ Sep-15	Jun-16	Due to delay in permission by the Forest Deptt.
6.	Providing sewerage scheme and treatment plant for Hathin Town, Palwal District	12.30	Aug-11	Jul-14/ Sep-15	Jun-16	The work for laying of sewer was held up due to interference of local residents. Now the work is in progress.
7.	Providing sewerage scheme for Punhana Town in Mewat Distt.	12.50	Aug-11	Jul-14/ Sep-15	Jun-16	The work for laying of sewer was held up due to interference of local residents. Now the work is in progress.

**Point for Decision:** The Group may approve the requested extensions directing the respective Implementing Agency to complete the pending works within the sought extensions and take necessary steps to avoid such delays in the projects.



## Agenda Item No. 6: Monitoring of developments at site in the National Capital Region (NCR) through use of Remote Sensing and GIS technology

The **Hon'ble Committee on Petitions of Rajya Sabha** in its 146th Report has suggested to utilize the latest technology viz. GIS mapping with the help of satellite imaging, in collaboration with the Department of Space to monitor the development in the region.

2. In one of the court case, Hon'ble High Court of Delhi vide its Order dated **30.09.2014** had directed the following:

➤ *by directing the NCRPB:*

- (i) *to monitor and be vigilant of the developments at site in the NCR and also in preparation of the Sub-Regional Plans and the Master Plans of the towns falling in the NCR;*
- (ii) *to immediately, upon finding any violations thereof, take action under Section 29(1) of the Act;*
- (iii) *to regularly, from time to time, keep the Central Government informed of the violations if any of the Regional Plan;*

➤ *by imploring the State Governments to, forgetting legalese and technicalities, ensure that the purpose for which the NCRPB was created is fulfilled in letter and spirit by ensuring the developments in the respective sub-regions of the NCR are in accordance with the Regional Plan and by fully cooperating with the NCRPB in this respect.*

3. Section 7 (c) of the NCRPB Act, 1985 provides for coordination of the enforcement and implementation of the Regional Plan, Functional Plans, Sub-Regional Plans and Project Plans **through the participating States and the Union territory.**

Section 20 of the NCRPB Act, 1985 makes **each participating State of NCR responsible** for the implementation of the Sub-Regional Plan, as finalized by it under Section 19(3) of the NCR Planning Board Act, 1985 and Project Plans prepared by it.

4. Coordinating and monitoring the enforcement and implementation of the Regional Plan is done through Steering Committee under the chairmanship of Chief Secretary of the respective participating State Governments; Statutory Planning Committee under the chairmanship of the Member Secretary, NCRPB; Project Sanctioning & Monitoring Group-I (PSMG-I) under the chairmanship of Secretary, M/o Urban Development and NCR Planning Board under the chairmanship of Union Minister for Urban Development in its various meetings held from time to time.

5. Board has created NCR Planning & Monitoring Cells in each of the NCR participating State which are under the administrative control of the respective State Governments. They have been assigned various works as per Work Programme sent to them and one of the work allocated is ***to monitor the implementation of the Regional Plan-2021 and in case of any violation, bring the same to the notice of NCRPB.*** Therefore, the monitoring of development in the region including development at site (which is a micro level issue) is also required to be carried out by the NCR participating States through NCR Planning & Monitoring Cells.



6. There is a need to develop additional mechanism to comply with the orders of the Hon'ble Delhi High Court, apart from monitoring of implementation of the Regional Plan through various Committees, with use of GIS and Remote Sensing Technology, since the area of NCR is 54,188 Sq. Kms. and there are about 168 urban settlements in 13 districts of Haryana Sub-region, 07 district of UP Sub-region and 02 districts of Rajasthan Sub-region apart from NCT-Delhi.

7. In view of the above NCRPB office through a DO letter dated 27.07.2015 communicated the concern to National Remote Sensing Centre (NRSC), Govt. of India followed by a meeting held at NRSC, Hyderabad on 11.09.2015. Based on the detailed discussions and deliberation during the meeting, NRSC had prepared a Project Proposal.

The study area comprises of NCT-Delhi, seven districts adjoining NCT-Delhi and district Alwar of Rajasthan Sub-Region, covering a total area of around 18,880 Sq.Kms. These seven districts are Faridabad, Jhajjar, Sonapat & Gurgaon districts in Haryana Sub-Region and Ghaziabad, Gautam Budh Nagar & Baghpat districts of UP Sub-Region.

A detailed study for the district of Gurgaon will be done by NCRPB in association with NRSC and subsequently based on the Pilot Study, for the remaining districts, the work will be carried out by the respective NCR Participating States.

Copy of the Proposal is at **Appendix-I**. Breakup of the cost is as under:

SI No.	Description	Amount (Rs)
1	Remote Sensing Satellite Data Cost	10,84,000 x 3 = <b>3252000</b>
2	Manpower Cost (Development of Bhuvan-NCRPB & Satellite Data processing)	178486 + 155820 x 3 = <b>645946</b>
3	Capacity Building Cost (3 yrs)	262500 x 3 = <b>7,87,500</b>
4	Field Visit	<b>2,00,000</b>
5	Miscellaneous expenditure including travel and other project related expenditure	<b>3,00,000</b>
6	<b>Sub Total (I)</b>	<b>5185446</b>
7	5 % Project management	<b>259273</b>
8	<b>Sub Total (II)</b>	<b>5444719</b>
9	10% NRSC Overhead	<b>544472</b>
10	<b>Sub Total (III)</b>	<b>5989191</b>
11	Bhuvan services @ 2%	<b>119784</b>
12	<b>Sub Total (IV)</b>	<b>6108975</b>
13	Service Tax @ 14.5% if applicable	<b>885802</b>
14	<b>Total</b>	<b>69,94,777</b>

**Action Point: The Proposal submitted by NRSC for “Monitoring of developments at site in the National Capital Region (NCR) through use of Remote Sensing and GIS technology” with cost estimate of Rs. 69.95 lakhs may be considered for approval by the PSMG-I.**



**Appendix-I****Project Proposal**

Monitoring of developments at site in the National Capital Region (NCR) through use of Remote Sensing and GIS technology

**Prepared by**



**nrsc**

**National Remote Sensing Center (NRSC)  
Dept. of Space, Indian Space Research Organisation (ISRO)  
Govt. of India, Hyderabad**

**Prepared for**



**National Capital Region Planning Board (NCRPB)  
New Delhi**

**December 2015**



**NATIONAL REMOTE SENSING CENTRE  
DOCUMENT CONTROL SHEET**

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8.	<b>Author(s)</b>	Dr.K.Venugopala Rao			
9.	<b>Affiliation of authors</b>	US&GIG, RSA A, NRSC			
10.	<b>Scrutiny mechanism</b>	<b>Compiled by</b> US&GIG	<b>Reviewed by</b> GH US&GIG	<b>Approved /Controlled by</b> RSA A	
11.	<b>Originating unit</b>	Urban Studies & Geoinformatics , RSA A, NRSC			
12.	<b>Sponsor(s) / Name and Address</b>	NCRPB, New Delhi			
13.	<b>Date of Initiation</b>				
14.	<b>Date of Publication</b>				
15.	<b>Abstract (with Keywords)</b>				



## **Monitoring of developments at site in the National Capital Region (NCR) through use of Remote Sensing and GIS technology**

### **1. INTRODUCTION**

The NCR Planning Board constituted under the National Capital Region Planning Board (NCRPB) Act 1985. has the mandate for preparing Plan for the development of the National Capital Region and for coordinating and monitoring the implementation of the plan and for evolving harmonized policies for the control of land uses and development of infrastructure in the region so as to avoid any haphazard development. The Board had prepared the Regional Plan 2001 for development of National Capital Region (NCR) which was notified on 23.01.1989. Subsequently, the Regional Plan 2021 (RP 2021) was prepared by NCRPB. Based on the land use analysis made by NRSC, the proposed land uses and other development proposals for the RP-2021 were evolved and formulated and notified on 17.09.2005 for implementation. Further, in 2012, Review of Regional Plan – 2021 was done by NCRPB using the space based landuse analysis inputs provided by NRSC and the “Draft Revised Regional Plan - 2021” was approved in 33rd meeting of NCRPB held on 01-07-2013.

Presently, Hon'ble Delhi High Court, vide its Office Order dated 30.09.2014 had directed NCRPB the following:

- i. to monitor and be vigilant of the developments at site in the NCR and also in preparation of the Sub-Regional Plans and the Master Plans of the towns falling in the NCR.*
- ii. to immediately, upon finding any violations thereof, take action under Section 29(I) of the Act;*
- iii. to regularly, from time to time, keep the Central Government informed of the violations if any of the Regional Plan;*

Also, The Hon'ble Committee on Petitions of Rajya Sabha in its 146th report has also suggested to utilize the latest technology viz. GIS mapping with the help of satellite imaging, in collaboration with Department of Space to monitor the development in the National Capital Region.

In this regard, NCRPB has desired to use space based remote sensing technology for monitoring the developments at Sites in NCR on a regular basis through Bhuvan Portal.

#### **a) User request / User communication / Project initiation, discussion records**

Vide letter No. K-14011/88/2008/NCRPB (Vol.-II), dt.27.07.2015, Member Secretary, NCRPB has conveyed that apart from monitoring of implementation of the Regional Plan through various committees, an additional mechanism is proposed to be developed to comply with the orders of Hon'ble Delhi High Court in the form of a study, which will obtain time series satellite data for monitoring the developments in selected districts of NCR and further extend to entire NCR. NCRPB has requested NRSC to





take up this study for the selected districts of NCR through yearly time series high resolution remote sensing data acquired on a specific time/month. Subsequently, during the signing of MoU between NRSC and NCRPB for Mapping of Additional three districts of NCR, held on 11 Sept, 2015, technical issues and the modalities for carrying out the above Monitoring activity was discussed.

**b) *Relevance to the larger goal(s)***

As per the D.O letter this study is to be done for CNCR districts i.e NCT -Delhi and Eight districts (Gurgaon, Faridabad, Jhajjar & Sonapat districts of Haryana Sub-region; Ghaziabad, Gautambudh Nagar & Baghpat districts of UP Sub-region and district Alwar of Rajasthan Sub-region) and later extended to other districts of NCR.

**2. OBJECTIVE AND SCOPE OF WORK**

**a. Bhuvan-NCRPB and Mobile App:**

- Development of a Web based application on Bhuvan with necessary GIS tools for Monitoring of developments at sites in NCR and Change analysis.
- Providing latest satellite data availability information automatically to NCRPB through SMS and e-mail.
- Providing the secured access based user names / passwords to NCRPB/Participating States
- Develop a Mobile Application to assist the exercise of field verification and updation / modification on Bhuvan-NCRPB Geo-Portal.

**b. Satellite data on Bhuvan-NCRPB:**

- Periodical Acquisition (once in a year, specific time/month i.e Oct-Mar) of Cartosat-1 and LISS IV MX Satellite data or any other equivalent satellite data starting from 2016 and Uploading on Bhuvan-NCRPB for monitoring the changes. In case of non- availability of Cartosat-1 and LISS IV MX, equivalent or better satellite data shall be used.

**c. Change Analysis**

- The Pilot Study (Gurgaon District) will be done by NCRPB, in association with NRSC and subsequently based on the Pilot Study, for the remaining districts the work will be carried out by the respective NCR Participating States.
- Taking 2012 as the base year, change analysis will be carried out on an year to year basis upto three years, with reference to the satellite data and change analysis reports will be generated.
- Field verification of the Changes/developments/encroachments using Mobile App with Geo-tagged photos, Location (Lat,long), unique number and nearby landmarks for the Pilot Study (Gurgaon District) will be done by NCRPB in association with NRSC and for the remaining districts this will be carried out by the respective NCR Participating States.



- Updation/Modification based on the Field verification report for the Pilot Study (Gurgaon District) will be done by NCRPB in association with NRSC and for the remaining districts this will be carried out by the respective NCR Participating States.

#### d. Capacity Building

- NRSC will provide the training to NCRPB/Participating States Officials personnel for operating Bhuvan-NCRPB application for interpretation of satellite images & change analysis report and Usage of Mobile App for field verification.

### 3. STUDY AREA

The entire study area comprises of NCT-Delhi, seven districts adjoining NCT-Delhi and Alwar district of Rajasthan Sub-Region, covering an area of about 18,800 sq.km is as shown in Figure 1. The pilot study will be carried out for One District (Gurgaon district) by NCRPB in association with NRSC. The change analysis and monitoring activity for NCT Delhi and remaining Seven districts (Faridabad, Jhajjar & Sonapat districts of Haryana Sub-region; Ghaziabad, Gautambudh Nagar & Baghpat districts of UP Sub-region and district Alwar of Rajasthan Sub-region) will be done by the respective NCR Participating States as shown in the figure 2

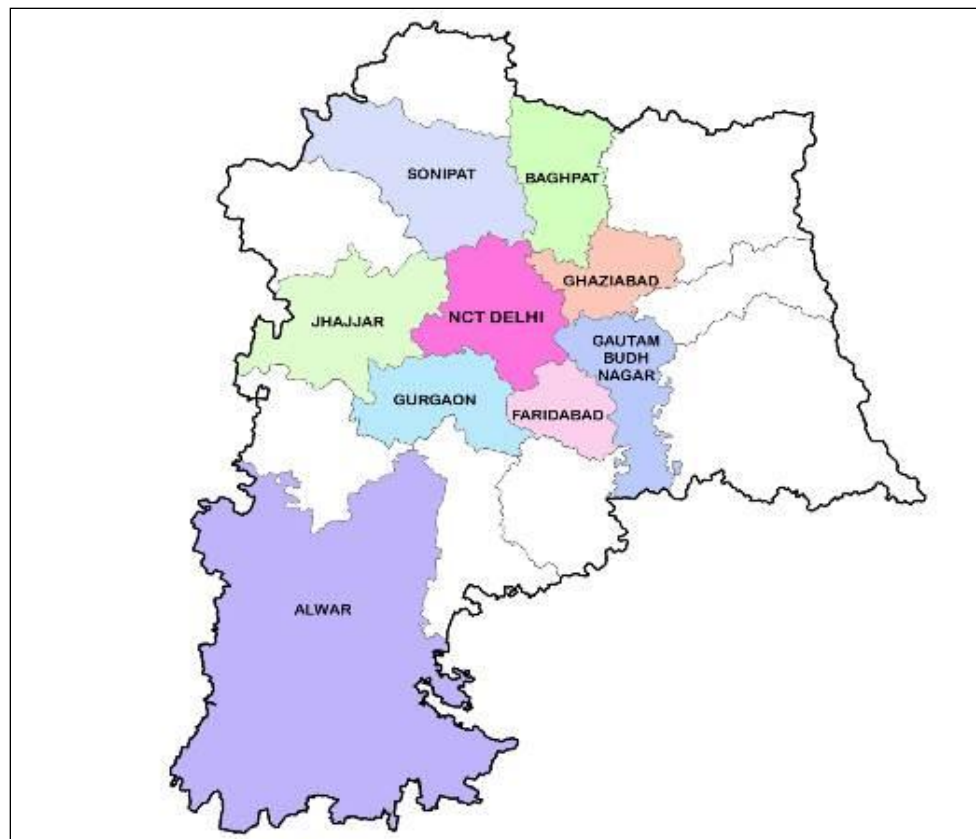


Figure-1: Study Area for Monitoring of Developments at Sites in NCR

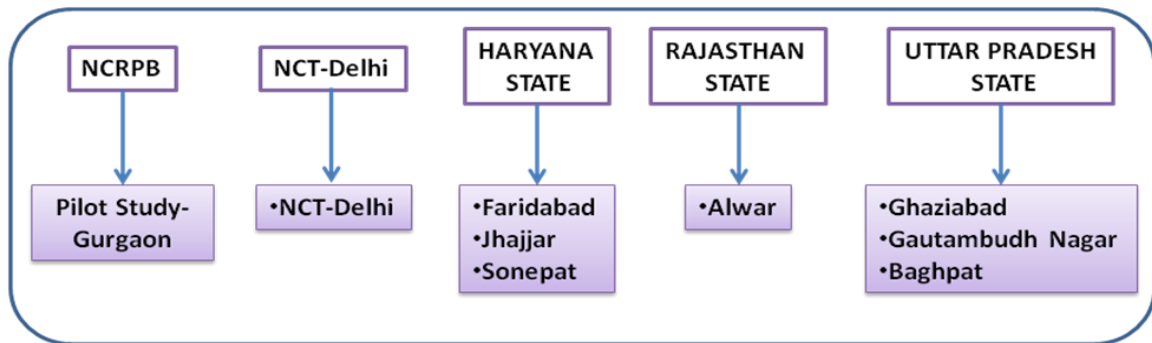


Figure-2: Sub-Region wise Study Area

#### 4. METHODOLOGY

The broad methodology is as given in figure 3.

- a. The satellite Image Scenes to cover the Study Area will be identified and the yearly acquisition will be planned.

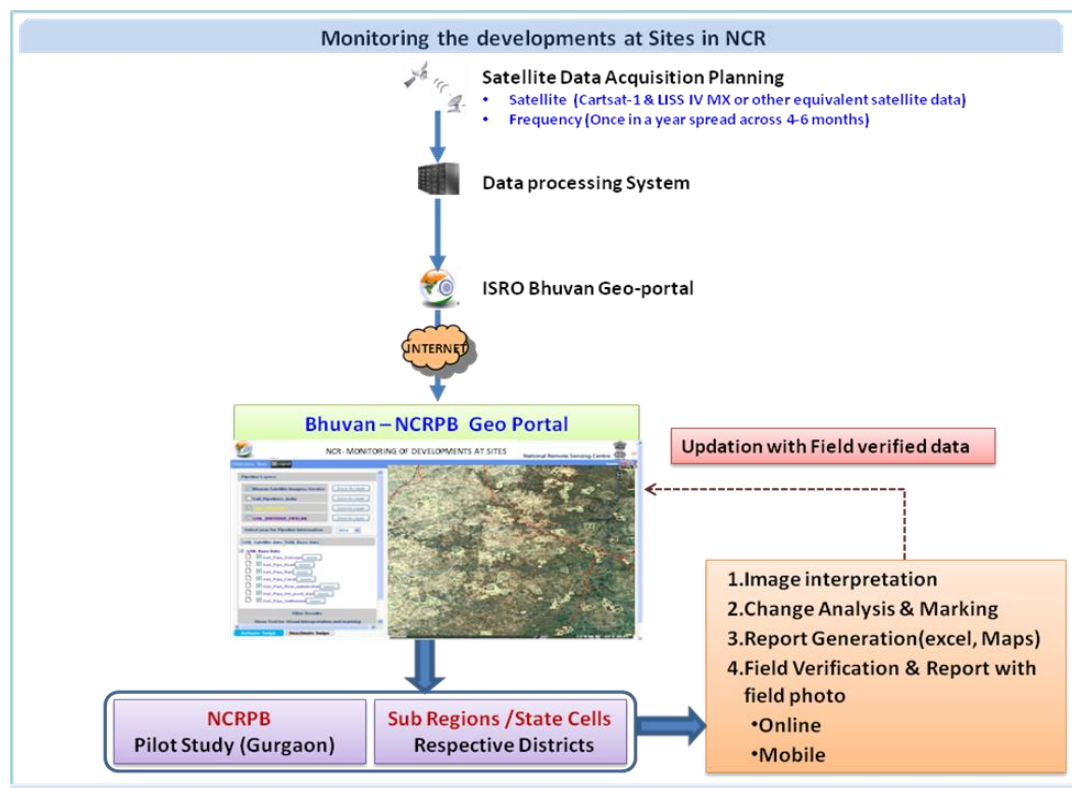


Figure -3 : Methodology

- b. Bhuvan-NCRPB for Change Analysis and regular monitoring of developments at Sites in Study Area will be developed with the following features
- Hosting and Visualization of satellite data
  - Software tools for interpretation & Change analysis and marking changes/developments/encroachments as point/line/polygon and attaching necessary attributes.
  - Preparation of change analysis report in excel / pdf map for using in the field verification.
  - Mobile Application for field verification and updation on Bhuvan-NCRPB based on the field verified data.
  - Secured access based user name & password to Bhuvan-NCRPB.
- c. Starting from year 2016, upto three years, Change analysis will be done every year using Bhuvan-NCRPB application. The latest satellite data will be compared with previous satellite data to generate the changes/developments/deviations from proposed Regional landuse.
- d. The changes will be marked as point or line or polygon based on the nature of development along with attributes like Location (Lat,long) , unique number, nearby landmark and any other information relevant suggested by NCRPB/Participating States.
- e. The change analysis reports as excel file with attributes like Location (Lat,long) , unique number, nearby landmark and A3/A4/A0 size map in pdf format with attributes will be prepared for providing to NCRPB/Participating States field personnel to verify in the ground.
- f. Mobile App will be used for field verification, Geo-tagging of photographs and uploading the field attributes, with latitude, longitude & photo to Bhuvan-NCRPB.

## 5. EXPECTED DELIVERABLES

- a. Web based Bhuvan-NCRPB application system for regular monitoring of developments at Sites in Study Area.
- Software tools developed on Bhuvan-NCRPB for interpretation& analysis and marking new developments as point/line/polygon and attaching unique number and necessary attributes.
  - Software tools on Bhuvan-NCRPB for preparation of change analysis report in excel / pdf map for using in the field verification.
  - Mobile Application for field verification and updation on Bhuvan-NCRPB based on the field verified data.
  - Secured access based on user name & password to Bhuvan-NCRPB.
  - Specifications of Computer Systems and internet facility for functioning and operationalization of Bhuvan-NCRPB Geo-Portal for regular monitoring of developments.
- b. Capacity Building of NCRPB officials and Participating States.



## 6. RESPONSIBILITIES OF NCRPB & PARTICIPATING STATES

- a. To provide the input requirements.
- b. To provide the georeferenced shape files of Administrative and Revenue boundaries such as Village boundaries and Survey boundary.
- c. The Pilot study for One district (Gurgaon district) will be carried out by NCRPB in association with NRSC and for the remaining districts will be carried out by the respective Participating States.
- d. Field verification of the developments/changes and violations using Mobile App and Uploading the field data - Pilot study (Gurgaon district) by NCRPB in association with NRSC and the Remaining districts will be done by the respective Participating States.
- e. To establish a dedicated facility in NCRPB as well as in NCR Participating States with required Computer systems and internet facility for operationalization of Bhuvan-NCRPB for regular monitoring of developments.
- f. To depute necessary manpower to attend the training on usage and working of Bhuvan-NCRPB and the Mobile App.
- g. In case, Cartosat-1& LISS IV MX data becomes unavailable in future, the cost of alternate satellite shall be paid by NCRPB/ Participating States.

## 7. RESPONSIBILITIES OF NRSC

- a. Requirements analysis in association with NCRPB
- b. Develop Bhuvan-NCRPB Geo-Portal and Mobile Application.
- c. Identification of Satellite Image Scenes for covering the study area.
- d. Planning for Satellite data acquisition & Procurement of Satellite Images to meet the requirement.
- e. Execute the project as per the methodology.
- f. Technical Support.
- g. Training & Capacity Building of NCRPB and Participating States Officials.
- h. Any change in satellite data cost will be informed to NCRPB
- i. Any change of High Resolution satellite data shall be informed to NCRPB for taking alternative satellite data.
- j. In case cartosat-1 becomes unavailable in future, NRSC will propose the alternate technically suitable satellite data and the additional cost shall be borne by NCRPB.

## 8. DURATION

The total duration of this project is 3 years.



## 9. TIME SCHEDULE (Table-1)

Sl#	Description	1 <sup>st</sup> Year				2 <sup>nd</sup> , 3 <sup>rd</sup> Year			
		1	2	3	4	1	2	3	4
1.	Requirement analysis	↔							
2.	Identification of satellite Image Scenes to cover the Study Area / Satellite data planning / Acquiring	↔	→						
3.	Satellite data processing (Georeferencing & Seamless mosaic)		↔	→					
4.	Developing Bhuvan-NCRPB Geo-Portal and Mobile Application		↔	→					
5.	Capacity Building				◊		◊		
6.	Satellite data planning/ acquiring/ geo-referencing / uploading on Bhuvan-NCRPB					↔	→		
7.	Change Analysis			←	→			→	
8.	Field verification Checking of Violations and Updation			←	→				→

**Note:** The entire work of Pilot Study will be carried out within first year of the Study.

## 11. BUDGET (Rupees)

The budget comprises of following major components:

- Satellite Data Cost - Cost for Pilot study will be borne by NCRPB and for remaining districts will be borne by respective NCR Participating states.
- Cost of Development of Bhuvan-NCRPB Application will be borne by NCRPB.
- Manpower Cost for Development of Bhuvan-NCRPB and Satellite Data processing, Geo-referencing and Uploading of data will be borne by NCRPB
- Capacity Building - Cost will be borne by NCRPB.

### 11.1 Satellite Data Cost:

Cartosat-1 (2.5m resolution) and LISS IV MX (5.8m) fused data will be used for monitoring the development at Sites in NCR. The cost has been calculated for Pilot Study and Sub-region wise districts separately.



**Table-2: Satellite Data Cost**

SI. NO	Satellite data	Unit/Scene rate (RS)	No. scenes covering the study area	Total Cost for one time coverage (Rs)
<b>Pilot Study (Gurgaon district) Coverage once in a year</b> (spread across 4-6 months)				
1	Cartosat-1	8000	10	80000
2	Resourcesat-2 L4MX	12000	2	24000
<b>Satellite Data Cost per Year</b>				<b>104000</b>
<b>Haryana Sub region (Faridabad,Jhajjar &amp; Sonapat ) Coverage once in a year</b> (spread across 4-6 months)				
1	Cartosat-1	8000	30	240000
2	Resourcesat-2 L4MX	12000	8	96000
<b>Satellite Data Cost per Year</b>				<b>336000</b>
<b>UP Sub region (Baghpat,Gautambudh Nagar,Ghaziabad) Coverage once in a year</b> (spread across 4-6 months)				
1	Cartosat-1	8000	21	168000
2	Resourcesat-2 L4MX	12000	6	72000
<b>Satellite Data Cost per Year</b>				<b>240000</b>
<b>Rajasthan Sub region (Alwar) Coverage once in a year</b> (spread across 4-6 months)				
1	Cartosat-1	8000	29	232000
2	Resourcesat-2 L4MX	12000	7	84000
<b>Satellite Data Cost per Year</b>				<b>316000</b>
<b>NCT-Delhi Coverage once in a year</b> (spread across 4-6 months)				
1	Cartosat-1	8000	8	64000
2	Resourcesat-2 L4MX	12000	2	24000
<b>Satellite Data Cost per Year</b>				<b>88000</b>
<b>TOTAL SATELLITE DATA COST PER YEAR</b>				<b>10,84,000</b>

Note:

1. Presently Cartosat-1 data is projected. In case of non-availability of Cartosat-1 data, other alternative high resolution satellite will be proposed by NRSC and cost shall be borne by NCRPB.
2. Any change in the Study area, the number of satellite scenes and cost of the satellite data are subjected to change.
3. The budget projected for Satellite data cost shall be subjected to change as per change in Satellite data and cost.





## 11.2 Manpower Cost:

Manpower cost has been calculated for Satellite data processing, Georeferencing, Uploading to Bhuvan-NCRPB and Development of Bhuvan-NCRPB application.

**Table-3: Manpower Cost**

<b>Manpower for satellite data pre-processing, Georeferencing, and uploading to Bhuvan-NCRPB and providing the necessary technical support to NCRPB/Participating States</b>				
1	Sci/Engr 'SC' (Rs. 1,11,300/-)	2 months	Rs: 77910 per month (@70%)	155820 per year
<b>Manpower for Software Development on Bhuvan-NCRPB</b>				
2	Sci/Engr 'SE' (Rs. 1,27,490)	2 months	Rs: 89243 per month (@70%)	178486

## 11.3 Capacity Building:

Capacity building of officials of NCRPB/Participating States on Bhuvan-NCRPB is also envisaged. One day training for Senior level Officers and Three day training for Working Level officers, on the features and usage of Bhuvan-NCRPB and the Mobile App is planned.

**Table-4: Capacity Building**

SI #	Description	No. of Officials	Amount (RS)	
I	1 day training on Bhuvan-NCRPB web application and Mobile App for Senior officials	25	Rs.3000 per person per day	$3000 \times 25 \times 1 =$ <b>75000</b>
II	3 day training on Bhuvan-NCRPB web application and Mobile App for Working level officials	25	Rs.2500 per person per day	$2500 \times 25 \times 3 =$ <b>187500</b>
<b>Cost for Capacity Building per year</b>				<b>262500</b>

## 11.4 Total Budget:

**Table -5 : Total cost of the project**

SI No.	Description	Amount (Rs)
1	Remote Sensing Satellite Data Cost	$10,84,000 \times 3 =$ <b>3252000</b>
2	Manpower Cost (Development of Bhuvan-NCRPB & Satellite Data processing)	$178486 + 155820 \times 3 =$ <b>645946</b>
3	Capacity Building Cost (3 yrs)	$262500 \times 3 =$ <b>7,87,500</b>
4	Field Visit	<b>2,00,000</b>



SI No.	Description	Amount (Rs)
5	Miscellaneous expenditure including travel and other project related expenditure	3,00,000
6	<b>Sub Total (I)</b>	<b>5185446</b>
7	5 % Project management	259273
8	<b>Sub Total (II)</b>	<b>5444719</b>
9	10% NRSC Overhead	544472
10	<b>Sub Total (III)</b>	<b>5989191</b>
11	Bhuvan services @ 2%	119784
12	<b>Sub Total (IV)</b>	<b>6108975</b>
13	Service Tax @ 14.5% if applicable	885802
14	<b>Total</b>	<b>69,94,777</b>

*Note : Any cost change of satellite data shall be applicable and shall be borne by NCRPB.*

## 12. PROJECT COST

The total cost of the Project is **Rs.69.95 lakhs** as per the break-up provided in Table-5. Considering the project requirement, NRSC can re-appropriate funds from one budget head to the other without altering the overall project cost. Service Tax shall be payable if applicable.

## 13. CUSTODY OF EQUIPMENTS

After completion of the Project, any Hardware/Software purchased by NRSC for carrying out this Project will be retained by the NRSC, Hyderabad, for further research studies.

## 14. PAYMENT TERMS (Table-6):

No.	Payment Schedule	Amount
1	Upon acceptance of the project	90% of the total cost
3	Before Submission of Final Report	10 % of the total cost

The NRSC is exempted from Income Tax. A Relevant Exemption Certificate will be submitted with the Invoices. Therefore, NCRPB should not affect TDS while making payments.

## 15. PROJECT MONITORING

A Joint Project Team (JPT) comprising members from NRSC and NCRPB will be constituted by nominating 2 to 3 representative(s) each to the JPT. The coordinator of



the JPT shall be the Deputy Director, RSA-A, NRSC. The other JPT member representing NRSC shall be the Group Head, Urban Studies & Geoinformatics Group. One of the JPT members from NCRPB's side shall be the NCRPB's In-Charge for the Project. Besides, NCRPB may include additional persons as it deems fit. The JPT will be responsible for carrying out a technical review of the Project and shall prepare a detailed programme for meeting the Milestones as per the agreed timelines in line with the Work Plan. The JPT shall meet on a Quarterly basis to monitor the Project's progress and final outcome.

#### **Mid-course modifications, if any**

- **Minor technical changes by JPT-** The JPT shall be responsible for review of the Project and its mid-term correction, if necessary.

#### **16. INTELLECTUAL PROPERTY RIGHTS**

The intellectual property rights for the outputs from this project will vest NRSC / ISRO.

#### **17. CONFIDENTIALITY**

The output of the project is for Official Use of NCRPB. The data can also be shared with various government users with written intimation to Project Director / DD, RS AA. For request of data from other users, permission from the Project Director / DD RSAA to be sought before sharing the data.

#### **18. USER FEEDBACK**

The outputs of the project will be analyzed by the user and any feedback to be given within two months.

#### **19. POST PROJECT SERVICES, IF ANY**

Nil

#### **20. ARBITRATION**

Not applicable

#### **21. FORCE MAJEURE**

Neither party shall be held responsible for non-fulfillment of their respective obligation under the MoU due to the exigency of one or more of the unforeseen events such as but not limited to Acts of God, war, flood, earthquake, strike, lockouts, epidemics, riots, civil commotion etc. provided on the occurrence and cessation of any such events.



## Annexure-I

**National Capital Region Planning Board****Minutes of the 52<sup>nd</sup> Meeting of the Project Sanctioning & Monitoring Group – I  
of the NCR Planning Board**

The 52<sup>nd</sup> Meeting of the Project Sanctioning & Monitoring Group – I (PSMG-I) was held at 11.30 AM on 21.05.2015 under the Chairmanship of Secretary, Ministry of Urban Development, Govt. of India at Nirman Bhawan, New Delhi. The list of the participants is enclosed as Annexure-I.

Welcoming the participants, Member Secretary initiated the discussion with the permission of the chair.

**Agenda Item No. 1: Confirmation of the Minutes of the 51<sup>st</sup> PSMG-I Meeting**

The Minutes were confirmed.

**Agenda Item No. 2: Action Taken Report (ATR) of 51<sup>st</sup> PSMG-I meeting decisions**

Action Taken Report on the decisions of the 51<sup>st</sup> PSMG-I meeting held on 30.12.2013 was discussed at length. As the reimbursement of commitment charges on the non-starter projects by Government of Haryana & Delhi are still pending, Secretary, UD directed the concerned officials from respective States to expedite the same. The Group was also informed that an audit para has also been raised by C&AG in this regard and the States should accordingly take up the matter of reimbursement on priority. Engineer in Chief, PHED, Haryana informed that the matter was discussed in the recent Steering Committee meeting chaired by Chief Secretary, Govt. of Haryana and the case has been submitted to Finance Department for necessary approval. Deputy Secretary, PWD, GNCT of Delhi informed the Group that the Transport Department, GNCT of Delhi had been requested to expedite the requisite payments as the matter pertains to them.

With regard to evaluation study for completed projects under, “Consultancy Services for Evaluation of NCRPB Assisted Water Supply & Sewerage Projects Post Completion”, MS.NCRPB updated the Group that out of 13 completed projects pertaining to PHED, Haryana, final reports have been received for six projects and another two are under finalization by M/s EIL. The evaluation of the balance five projects is still underway for want of information from PHED, Haryana. Secretary (UD) directed E-in-C, PHED, Haryana to give timelines within which the information shall be made available for completing the study. E-in-C, PHED, Haryana informed that the requisite data shall be made available within two to three weeks.



Regarding the delay in progress of the project “Construction of Multi-storied office building at Karkardooma Institutional area at Shahdara South Zone by EDMC” sanctioned in 51<sup>st</sup> PSMG meeting, Additional Secretary, UD suggested that the East Delhi Municipal Corporation needs to specify a timeline with respect to its re-tendering and thereafter the likely project completion dates. Secretary, UD cautioned that in case the timelines are not provided within a month, a decision would be taken to cancel the sanctioned loan and recall the amount of Rs. 20 Cr. released to EDMC.

Member Secretary further informed the Group that out of the seven road projects for which loans were sanctioned in the 51<sup>st</sup> PSMG, four road projects have been withdrawn by PWD(B&R), Haryana. Additional Chief Secretary, PWD(B&R), Haryana clarified that the decision was taken due to difficulties in land acquisition under the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013) introduced w.e.f. 1.1.2014. Further, the decision was taken after due approval of Hon’ble Chief Minister, Govt. of Haryana. Regarding other three road projects for which loans were sanctioned in the 51<sup>st</sup> PSMG-I, it was informed that while one required MoEF clearance and necessary action accordingly is being taken as per the advice of State Environment Department, the scope for other two projects has been revised and re-submitted for sanction of revised loan amount.

Issues pertaining to progress of utilization of funds raised from ADB & KfW, debt servicing and loan recovery position were reviewed.

### **Agenda Item No 3: Status Note on Assistance by Asian Development Bank (ADB) and KfW (German Development Bank) to NCRPB**

Director (A&F), NCRPB, while presenting the status of financial assistance from ADB & KfW informed that while a total amount of Euro 18.98 million has been claimed from KfW, the entire Tranche 1 loan amount of USD 60 million has been drawn from ADB by the loan closing date of 31.12.2014. It was also informed that there has been no default in the payment of interest and commitment charges by NCRPB to ADB and KfW.

Further, the Group was informed that while PFR 2/Tranche 2 request was sent to DEA by NCRPB for USD 70 million in October 2014, ADB subsequently has highlighted certain social safeguard issues in few road projects being implemented under Tranche 1 which are not in compliance with the ADB’s Social Safeguard Policy (SPS-2009). This has delayed the Tranche-2 loan negotiation process between NCRPB and ADB. Director (A&F) mentioned that this issue was discussed at length by NCRPB at various levels i.e. Tripartite Portfolio Meetings of ADB, D/o Economic Affairs, Ministry of Finance and PWD (B&R) / HSRDC. She further explained that if no acceptable solution could be found to address social safeguard issues then ADB, in consultation with Government of India and NCRPB, might withdraw from the Project and this could result in pre-mature recalling of loan by ADB from NCRPB. In such case, the liability on NCRPB is likely to be passed on to Government of Haryana.

Additional Chief Secretary, PWD(B&R), Haryana mentioned that the social safeguard issues under discussion are due to non-payment of compensation to the title holders



as the Department is in adverse possession of the land for over 50 years in respect of two road projects viz., Sonapat District Roads and Gurgaon-Chandu-Badli-Bahadurgarh Road. He mentioned that the issue pertaining to payment of compensation for affected, encroached structures in Gohana-Lakhanmajra-Bhiwani Road, which is mandatory for projects under ADB line of credit, has been referred by PWD (B&R) Haryana to the State's Law Department for advice. Secretary (UD) emphasized that since agreements have already been executed between ADB / NCRPB / PWD (B&R), the issue needs to be resolved early and requested ACS, PWD (B&R) to take necessary action accordingly.

The Group accordingly noted the status.

Continuing with the discussions on items of Agenda 3, Director (A&F) informed the Board that as part of ADB requirements and also as per Environmental and Social Management Systems (ESMS) adopted by NCRPB w.e.f. April 2010, an ESMS audit has to be undertaken by NCRPB every year through independent Environmental & Social Safeguard Auditors.

Accordingly, NCRPB has shortlisted Environmental & a Social Experts after following the due procurement procedures of ADB. The procedures were approved by ADB at every stage. The audit covers six financial years in three Phases (Phase 1: 2010-14; Phase 2: 2014-15 & Phase 3: 2015-16). Two Consultants have been selected for conducting the audit.

After due deliberations, PSMG accorded post facto approval for the i) consultancy contract with Shri Deepak Malik for ESMS audit for Environment aspect for an amount of Rs. 15,87,338.00 for the period November 2014 to March 2017 and ii) consultancy contract with Ms. Manoshi Mitra for ESMS audit for Social aspect for an amount of Rs. 14,82,294.00 for the period November 2014 to March 2017.

#### **Agenda No.4: Projects re-submitted to NCRPB with Loan Requests with revised scope of work post PSMG approval**

Director (A&F) informed that although loans had been sanctioned for two road projects at an estimated cost of Rs. 157.73 Cr. in the 51<sup>st</sup> PSMG-I, these projects have been re-submitted by PWD (B&R), Haryana with revised scope of work on account of difficulties faced in the land acquisition under LA Act, 2013

The revised projects have been appraised from technical, financial, environmental and social angles by Project Management Consultancy of ADB. These projects are being proposed for the consideration and sanction of loan by the Group.

**Agenda No.4.1 A : Construction of road from Junction of NH-10 to NH-71 at Southern Bypass in Rohtak District**

**Agenda No.4.1 B : Various Roads in Rewari Division (Hailymandi to Pahlawas road, Kosli-Guryani to Pahlawas NH-71 Dahina Jatusana road) in Rewari District**



Additional Secretary (UD) observed that the overall estimated cost of the project and thereby the required loan amount is reduced, as the land acquisition components and the related civil works have now been deleted in the current proposal. Addl. Chief Secretary, PWD (B&R), Haryana informed that the total revised estimated cost for the two projects approved in 51<sup>st</sup> PSMG-I is now Rs. 111.19 Cr. as against the earlier amount of Rs. 157.73 Cr. and accordingly, revised loan sanction is required from PSMG-I.

After detailed deliberations, the Group approved loan assistance for the project under NCRPB funding. The loan will be subject to Govt. of Haryana making suitable budgetary provisions in the Annual Budget and also undertaking to complete the project as per approved DPR. In addition the loan release shall be subject to following:

- Approvals & clearances from Forest Department, Wildlife Authority & MOEF, wherever applicable, shall be obtained before award of work.
- The Environment Management Plan (EMP) along with the relevant mitigation measures provided in the IEE/EIA reports will be part of the bid document for implementation during the construction period.

The project-wise details of loan component sanctioned from NCRPB is as under and further as placed at Annexure-II A:

(Rs. In Cr.)			
Agenda No.	Name of the Project	Estimated Cost	Total Loan Component
4.1A	Construction of Road from junction of NH-10 to NH-71 southern Bye Pass in Rohtak district	27.66	20.75
4.2B	Various road in Rewari Division (Haily mandi to Pahlawas road, Kosli-Guryani to Pahlawas NH-71 and Dahina-Jatusana Road	83.53	62.65

#### **Agenda Item No. 5: Revision of project costs & corresponding loan amounts for the ongoing water supply projects at Nuh, Pataudi and Farukhnagar from PHED Haryana**

Director (A&F) informed that project cost for three (3) water supply projects from PHED Haryana for which loans were sanctioned under ADB / KfW line of credit in 46<sup>th</sup> & 47<sup>th</sup> PSMG-I meetings had been revised by PHED Haryana with the objective of having a common water treatment plant and intake and related water distribution pipeline for the three projects, against the earlier proposed separate intake and water treatment plants and related transmission pipelines. This has accordingly lead to some re-arrangement of cost for each project requiring revised loan sanctions. The summary of the revised cost and the required loan sanctions is as presented below:-





(Rs in Cr.)

Name of Project	Previous Estimated Costs	Loan Sanctioned in previous PSMGs	Revised Estimated Cost	Revised Loan amount
	46 <sup>th</sup> PSMG held on 4.8.2011			
1. Water Supply scheme for Nalhar Medical College and Nuh Town	105.61	79.21	150.00	112.50
	47 <sup>th</sup> PSMG held on 18.11.2011			
2. Augmentation of Water Supply for Pataudi and adjoining town of Haily Mandi along with surrounding seven villages	75.10	56.32	41.15	30.86
3. Augmentation of Water Supply for Farrukh Nagar Town & Five Villages	28.78	21.58	13.90	10.43
<b>Total</b>	<b>209.49</b>	<b>157.11</b>	<b>205.05</b>	<b>153.79</b>

E-in-C, PHED, Haryana added that the changes have led to decrease in overall cost and shall facilitate in using the infrastructure in a more efficient manner.

After deliberations, the Group approved the revised loan assistance for the projects under the ADB /KfW line of credit subject to compliance with ESMS requirements, obtaining statutory clearances such as forest clearance etc. & other requirements as per ADB/KfW policies and guidelines.

The project-wise detail regarding revised loan component sanctioned from NCRPB is as under and further as placed at Annexure-II B:

(Rs in Cr.)

Name of Project	Revised Estimated Cost	Revised Loan amount
1. Water Supply scheme for Nalhar Medical College and Nuh Town	150.00	112.50
2. Augmentation of Water Supply for Pataudi and adjoining town of Haily Mandi along with surrounding seven villages	41.15	30.86
3. Augmentation of Water Supply for Farrukh Nagar Town & Five Villages	13.90	10.43
<b>Total</b>	<b>205.05</b>	<b>153.79</b>



**Agenda No.6: New Projects submitted to NCRPB with Loan Requests****Agenda Item No. 6.1: Water Supply Project at IMT Manesar by HSIIDC**

Director (A&F), NCRPB initiated the discussions by informing that HSIIDC had approached NCRPB for financial assistance in respect of one water supply project pertaining to Manesar. The DPR had been appraised from technical, financial, environmental and social angles by PMCS available under ADB assistance.

Representatives from HSIIDC gave a short presentation on the project highlighting the need and the benefits expected from the project. It was informed that the plan was to cover the requirements upto the Development plan horizon year of 2031. Out of the total requirement of 175Mld, 35Mld is being met currently, 35Mld is proposed to be met via waste water reuse and additional canal water is proposed to be augmented for balance 90Mld in two phases of 45Mld each. The current project covered the first phase wherein augmentation is proposed for 45Mld from additional canal water and rehabilitation of existing canal water supply for another 15 Mld.

Additional Secretary, UD brought out that the location of the project site needs to be verified as to whether it falls within Natural Conservation Zone (NCZ). Director General, Town & Country Planning, Govt. of Haryana informed that the matter is being examined and that although NRSC images indicate the site to be in NCZ, the subsequent ground truthing exercise initiated has given different results. Secretary, UD directed that Govt. of Haryana should provide the exact status so that the issue can be resolved.

Accordingly, after deliberations, the Group approved the loan assistance for the project for funding under the NCRPB / ADB / KfW line of credit as per availability of funds and accordingly necessary procedures as applicable shall be followed by HSIIDC, Haryana. The loan will be subject to HSIIDC making suitable provisions in the Annual Budget and also undertaking to complete the project as per approved DPR. In addition the loan release shall be subject to following;

- A certificate from T&CP as well as HSIIDC confirming that the project site as well areas for which the project is envisaged do not fall under NCZ.
- Land should be in possession of HSIIDC, Haryana before physical commencement of work.
- Approvals & clearances from Forest Department, Wildlife Authority & MOEF, where applicable, shall be obtained before award of work.
- The Environment Management Plan (EMP) along with the relevant mitigation measures provided in the IEE/EIA reports will be part of the bid document for implementation during the construction period.

The project-wise detail regarding loan component sanctioned from NCRPB is as under and further as placed at Annexure-II C:



(Rs. In Cr.)		
Name of the Project	Estimated Cost	Total Loan Component
Water Supply Project at IMT Manesar by HSIIDC	223.80	155.65

### **Agenda Item No. 7: Review of Projects financed by the NCR Planning Board**

Member Secretary and Director (A&F), NCRPB presented a summary of the projects financed by the NCR Planning Board. It was informed that since its inception, the Board has approved loan assistance for 291 infrastructure projects with estimated cost of Rs. 19,738 crores, out of which an amount of Rs. 9,257 crores has been sanctioned as a loan. It was further, indicated that the Board has released a loan amount of Rs. 7,057 crores till March 2015 for these projects. It was further informed that out of 291 projects, 214 projects have been completed.

#### Delayed Projects

AS(UD) pointed out that out of 77 ongoing projects, 13 projects have been considerably delayed, out of which 10 projects are from Haryana. Secretary, UD directed the concerned officials to convey the Chief Secretary, Haryana to review the status of the ongoing projects including delayed projects. Additional Chief Secretary, PWD (B&R) has informed that a review meeting had been taken by Chief Secretary Haryana recently in this regard.

#### Non-Starter Project

Further, Director (A&F) informed that the project "Solar Bus Shelters with Solar Lantern Recharging Stations in Alwar District" of UIT Alwar is a nonstarter even after sanction of loan in December 2012 & release of Rs. 2.00 Cr in July 2013. Secretary, UIT, Alwar updated the status on the project indicating that while the project component pertaining to Solar Recharging Stations is now being dropped, the project is being re-tendered for the balance component of Bus Shelter construction. Secretary, UD directed that a proper plan of action & timeline be submitted to NCRPB and cautioned that if the project does not start soon, the necessary loan released may be recalled and loan sanctioned would be cancelled.

#### Non-submission of UC/CC

The Group was informed that although six of the ongoing projects had since been reported completed, the necessary Utilization Certificates & Completion Certificates are still awaited from the agencies - DHBVN, PWD (B&R), Directorate of Technical Education, Haryana; UIT Kota and Patiala Urban Development Authority. Secretary (UD) advised that the necessary action be taken by the concerned departments in this regard and the requisite submissions be expedited.

With regard to a Water Supply project from Patiala, Director (A&F) informed that while the project had been reported completed since long, necessary UC/CC is not received despite repeated requests. Representative from Patiala informed that the Utilisation



Certificate and the Completion Certificates shall be submitted within a week. On the suggestion of MS, NCRPB, Secretary, UD advised that the project shall be considered for shifting to completed list after receipt of necessary UC/CC and on-site verification of reported completion.

#### Completed & Withdrawn Projects

On the subject of project completion since 51<sup>st</sup> PSMG-I, Member Secretary, NCRPB informed that 17 projects had been reported completed and completion certificates have been received since last PSMG. Further, 6 road projects had since been withdrawn by PWD(B&R), Haryana citing land acquisition issues. No loans have been released for these six projects.

After deliberations, the Group decided that the 17 projects reported completed with completion certificates may be transferred to the list of completed projects (as per Annexure-III). The six projects which have since been withdrawn may also be removed from NCRPB's list of projects (as per Annexure-IV).

#### Time Extension for Ongoing Projects

Director (A&F) informed that requests for extension of completion dates was received for 16 projects from various implementing agencies. These include four transport sector projects from PWD (B&R), Haryana, three water supply, seven sewerage sector projects of PHED Haryana, 1 land development project of HSIIDC and SADA Gwalior. Secretary (UD) instructed the agencies to carefully examine the required extensions and indicate achievable timelines to ensure due completion of the projects by the dates of extension being granted.

After detailed discussion, the PSMG approved the extensions sought (as per Annexure-V), directing States/agencies to take necessary steps to avoid any further delays on these projects.

With respect to the HSIIDC project "Development of Industrial Zone Sector 34-35, Gurgaon", Managing Director, HSIIDC informed that although all the loan released by NCRPB has been repaid, the project could not be completed due to land litigations and court issues. He indicated that even the extension sought is subject to clearances from the courts, but HSIIDC is making efforts to complete all pending works from its own funds, as per the availability of land. The matter was deliberated upon by the Group in detail. Member Secretary, NCRPB suggested that the project can be considered as foreclosed on reduced cost, based on the assets created till date. It was accordingly, decided that since the sanctioned loan of Rs. 86 Cr., has been repaid and agency had reportedly executed necessary works on the available land and incurred expenditure to the tune of Rs. 133.19 Cr., the project may be treated as foreclosed and shifted to the list of completed projects.



### Agenda Item No. 8 : Creation and Updation of Regional Land use for the five additional districts of NCR

Initiating the discussions on the agenda, Chief Regional Planner, NCRPB informed that NCRPB is in receipt of a proposal regarding “Creation and Updation of Regional Land use for the five additional districts of NCR” for review of RP 2021 of NCR from National Remote Sensing Centre (NRSC). The study is proposed to be executed in 6 months’ time from the date of commencement with the effective date of commencement being date of signing of MoU. He informed that since inclusion of three new districts namely – Mahendergarh & Bhiwani in Haryana Subregion and Bharatpur in Rajasthan Subregion had been notified, the NRSC’s proposal may be considered for these three districts only.

After a brief discussion, the proposal submitted by NRSC for Creation and Updation of Regional Land use for three additional districts of NCR with cost estimate of Rs. 22.6 lakhs was approved as per the details below:-

S. No.	Stage	Payment Schedule
1.	Stage 1 Mobilization of Advance after signing of Memorandum of Understanding between NCRPB and NRSC	40% of the cost of Rs. 22.6 lakhs i.e. Rs. 9.04 lakhs.
2.	Stage 2 Submission of Draft Report and Maps	40% of the cost of Rs. 22.6 lakhs i.e. Rs. 9.04 lakhs.
3.	Stage 3 Submission of Draft Report and Maps, incorporating suggestions / modifications of proposals and closeout meeting / feedback.	20% of the cost of Rs. 22.6 lakhs i.e. Rs. 4.52 lakhs.

Concluding the meeting, Secretary (UD) expressed his concern over the project delays and urged the States to complete the projects within the scheduled time-frame. Member Secretary, NCRPB requested all the participating States especially Delhi, Uttar Pradesh, Rajasthan & the Counter Magnet Areas to avail the financial assistance from NCRPB, being offered at concessional rates for infrastructure projects in various sectors, in their respective sub-regions.

The Meeting ended with the vote of thanks to the Chair.

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**Annexure - I****List of Participants**

- |    |  |   |
|----|--|---|
| 1. | Shri Madhusudan Prasad,<br>Secretary (UD), Ministry of Urban Development,<br>Govt of India<br>Nirman Bhawan New Delhi. | Chairman  |
| 2. | Shri D. S. Mishra, Additional Secretary (UD),<br>Ministry of Urban Development   | Member  |
| 3. | Smt. Yashodhara Vijayan, Dy. Secretary (Finance),<br>MoUD  | Representing JS & FA,<br>Ministry of Urban<br>Development                       |
| 4. | Shri Arun Gupta, Director General, Town & Country<br>Planning Deptt., Haryana  | Representing Principal<br>Secretary, Town & Country<br>Planning Deptt., Haryana |
| 5. | Smt. Promilla Mitra, Dy. Secretary (NCR), NCR<br>Planning & Monitoring Cell, PWD, Delhi.                               | Representing Principal<br>Secretary (PWD), Govt. of<br>NCT Delhi                |
| 6. | Shri Kush Verma, Commissioner, NCR Planning &<br>Monitoring Cell, Government of Uttar Pradesh.                         | Representing Principal<br>Secretary (Housing), Govt.<br>of Uttar Pradesh        |
| 7. | Shri K.K. Joadder, Chief Planner, Town & Country<br>Planning Organization, Delhi.                                      | Member  |
| 8. | Shri B K Tripathi, Member Secretary, NCR Planning<br>Board, New Delhi  | Member-Convener   |

**Haryana****PWD (B&R)/HSRDC**

9. Shri Hardeep Kumar, Addl. Chief Secretary
10. Shri Mahesh Kumar, Managing Director
11. Shri Abhishek, DGM-I, Gurgaon

**HSI IDC**

12. Shri Vineet Garg, IAS, Managing Director.
13. Shri Arvind Mehtani, CTP, HSI IDC.
14. Shri Bhag Mal, Addl. GM (IA)
15. Shri O.P. Goel, DGM (IA)
16. Shri K.K. Bhugra, Retd. E-I-C, M/s KY Consultants (for HSI IDC)



PHED

17. Sh. A.K. Khetrapal, E in C

RajasthanUIT Alwar

18. Smt. Anupama Jorwal, IAS, Secretary  
19. Shri Shashikant, Dy. Town Planner, Alwar (Rajasthan)

DelhiEast Delhi Municipal Corporation (EDMC)

20. Shri Deepak Goel, Executive Engineer (Project)  
21. Shri V.K. Jain, Asstt. Engineer

DDA

22. Shri S.P. Pathak, Additional Commissioner (Plg), MPR&PC  
23. Shri S.B. Khodankar, Director (Plg), Master Plan

Counter Magnet AreasSADA Gwalior

24. Shri V.K. Sharma, Chief Executive Officer, N.C.R. Special Area Development Authority (Counter Magnet)  
25. Shri Mahak Singh, Sr. AO  
26. Shri S.K. Saxena, EE

Patiala Development Authority

27. Shri Prem Goyal, AO  
28. Shri S.S. Bajwa, DE

NCR Planning & Monitoring Cells

29. Shri J S Redhu, Chief Coordinator Planner, NCR Planning & Monitoring Cell, Panchkula, Haryana.  
30. Shri A.K. Tyagi, Chief Coordinator Planner, NCR Planning & Monitoring Cell, Uttar Pradesh.

Others

31. Dr. K. Venugopala Rao, NRSC, Hyderabad.  
32. Shri B.P. Gupta, TL, PMCS





- 33. Shri Sanjoy Mukherjee, GM (Infrastructure), Engineers India Limited
- 34. Shri Naveen Kumar, Dy. Manager, Engineers India Limited

**NCRPB**

- 35. Shri Rajeev Malhotra, Chief Regional Planner
- 36. Dr. Kavitha Gotru, Director (A&F)
- 37. Shri P.K. Jain, FAO
- 38. Shri Abhijeet Samanta, Dy. Director (Tech), PMC
- 39. Shri Nabil Jafri, DD (GIS)
- 40. Shri Syed Husain Asghar, AD (FM)
- 41. Ms. Tanushri Ghosh, AD (Procurement)



**Details of loans sanctioned (installment-wise) for various projects considered in in the 52nd PSMG Meeting held on 21.05.2015 (with revised scope of work post PSMG approval)**

														(Amount Rupees in Lakhs)		
Sl. No.	Agenda Item No.	Name of the Project	Borrowing Agency	Sector	Estimated Cost of Project approved as per 51st PSMG	Revised Estimated Cost	Total Loan Component approved as per 51st PSMG	Revised loan amount of NCRPB	Revised Phasing of loan instalment			Present Rate of Interest (% P.A.)	Moratorium for repayment of principal for the 1st instalment of loan (in years)	Tenure of loan for 1st instalment of loan (in years)	Stipulated date of completion	
									(2015-16)	(2016-17)	(2017-18)					
I	Project approved with revised scope of work post PSMG approval.															
1	4.1A	Construction of road from Junction of NH-10 & NH-71 at Southern Bypass in Rohtak District	PWD, B&R., Haryana	Road	5325.00	2766.00	3994.00	2075.00	830.00	1245.00	--	7.50	2	10	24 months from the issue of sanction letter	
2	4.1B	Various Roads in Rewari Division (Hailymandi to Pahlawas road, Kosli-Guryani to Pahlawas NH-71 Dahina Jatusana road) in Rewari District	-do-	Road	10448.00	8353.00	7836.00	6265.00	2506.00	3759.00	--	7.50	2	10	24 months from the issue of sanction letter	
		Sub total			15773.00	11119.00	11830.00	8340.00	3336.00	5004.00						

Details of loans sanctioned (installment-wise) for various projects considered in the 52nd PSMG-I Meeting held on 21.05.2015 (with revised cost and loan component)

(Amount Rupees in Lakhs)												
Sl. No.	Agenda Item No.	Name of the Project / PSMG approval date	Borrowing Agency	Sector	Previous Estimated Cost	Revised Estimated Cost	Loan sanctioned in previous PSMGs	Revised loan amount of NCRPB	Revised Phasing of loan instalment			Present Rate of Interest (%p.a.)
									Loan released till 2014-15	(2015-16)	(2016-17)	
<b>II</b>	<b>5</b>	<b>Revision of project cost &amp; corresponding loan amounts for 3 ongoing water supply projects</b>										
1		Water Supply scheme for Nalhar Medical College and Nuh Town (46th PSMG held on 4.8.2011)	PHED, Govt. of Haryana	Water Supply	10560.93	<b>15000.00</b>	7920.69	<b>11250.21</b>	2376.21	4437.00	4437.00	7.50
2		Augmentation of Water Supply for Pataudi and adjoining town of Haily Mandi along with surrounding seven villages. (47th PSMG held on 18.11.2011)	-do-	-do-	7509.91	<b>4115.00</b>	5632.43	<b>3085.73</b>	1689.73	698.00	698.00	7.50
3		Augmentation of Water Supply for Farrukh Nagar Town & Five Villages (47th PSMG held on 18.11.2011)	-do-	-do-	2877.68	<b>1390.00</b>	2158.26	<b>1043.00</b>	313.00	365.00	365.00	7.50
		<b>Sub total</b>			<b>20948.52</b>	<b>20505.00</b>	<b>15711.38</b>	<b>15378.94</b>	<b>4378.94</b>	<b>5500.00</b>	<b>5500.00</b>	
<b>Note:</b> The moratorium period for repayment of principal and tenure of loan will be as per earlier sanction order of NCRPB.												

**ANNEXURE - II C**

Details of loans sanctioned (installment-wise) for various projects considered in the 52nd PSMG Meeting held on 21.05.2015

													(Rs. In lakhs)
Sl. No.	Agenda Item No.	Name of the Project	Borrowing Agency	Sector	Estimated Cost of Project	Total Loan Component	Phasing of loan instalment			Present Rate of Interest (% P.A.)	Moratorium for repayment of principal for the 1st instalment of loan (in years)	Tenure of loan for 1st instalment of loan (in years)	Stipulated date of completion
							(2015-16)	(2016-17)	(2017-18)				
1	6	Water supply project at IMT Manesar by HSIIDC	HSIIDC	Water Supply	22380.00	15565.00	3113.00	6226.00	6226.00	7.50	3	15	36 months from the date of sanction letter



**Annexure-III****Projects Reported Completed and to be shifted to list of Completed projects**

(Rs. in Cr.)

S.No.	Name of the Projects	Implementing Agency	Date of sanction	Estimated cost
	<b>Haryana Sub Region</b>			
1.	Improvement of Other District Roads (ODRs) in Jhajjar district in Haryana Sub region.	PWD (B&R)	Nov-09	169.98
2.	Improvement of Other District Roads (ODRs) in Gurgaon district in Haryana Sub region.	PWD (B&R)	Nov-09	31.57
3.	Improvement by way of four laning of Jhajjar Dhaur Beri road	PWD (B&R)	Nov-08	29.34
4.	Improvement by way of four laning of Dighal Beri Jahazgarh road.	PWD (B&R)	Nov-08	42.86
5.	Project for improvement and construction of road in Jhajjar circle of NCR sub Region - Bahadurgarh Chhara Dujana Beri Kalanur road	PWD (B&R)	Nov-08	128.65
6.	Widening & Strengthening of Bahadurgarh Jhajjar Road in Jhajjar district of Haryana	PWD (B&R)	Dec-12	156.52
7.	Establishment of Polytechnic at Sampla, Rohtak District, Haryana	DTE	Jun-09	22.00
8.	Setting up of a coal based Thermal Power Project under stage I for 1200 MW (2 x 600 MW) in Hisar District, Haryana	HPGCL	Feb-07	4258.65
9.	Construction of Medical College with Teaching Hospital at District Mewat, Haryana	Health Dept., Haryana	Jun-09	318.91
10.	Augmentation and Extension of Water Supply in Kharkhoda town, Dist. Sonapat	PHED	Oct-07	13.91
11.	Ind water works newly developed area in western side of Rewari town, dist. Rewari	PHED	Oct-07	16.65
12.	Extension of sewerage system and treatment of sewage in Bawal, Dist Rewari	PHED	Oct-07	6.29
13.	Augmentation of water supply in Gohana Town	PHED	Nov-08	42.45
14.	Providing sewerage scheme & Treatment Plant for Kharkhoda Town, Dist. Sonapat	PHED	Feb-08	6.50
15.	Extension of sewerage system and treatment of sewage in Ganaur, Dist Sonapat	PHED	Feb-08	15.08



S.No.	Name of the Projects	Implementing Agency	Date of sanction	Estimated cost
16.	Providing distribution pipeline in various approved colonies of Sonapat town in District Sonapat	PHED	Nov-09	8.51
17.	Development of Industrial Zone Sector 34-35, Gurgaon, Haryana*	HSIIDC	Sep-05	366.65
	<b>Rajasthan Subregion</b>			
18.	EHV Transmission Schemes in NCR area of Rajasthan i.e. Alwar Distt. (including 6 Nos. of schemes)	Rajasthan Rajya Vidyut Prasaran Nigam Ltd.	May-10	125.98

\* PSMG decided to foreclose the project



**Annexure-IV****List of Withdrawn Projects**

S. No.	Name of the Projects	Date of sanction	Estimated cost	Loan Sanctioned
	<b>Loans sanctioned in the 49<sup>th</sup> PSMG held on 11.12.2012</b>			
1.	Construction of By-pass at Beri, in Jhajjar District of Haryana	Dec-12	48.82	36.62
2.	Construction of By-pass at Subana, in Jhajjar District of Haryana	Dec-12	25.18	18.89
	<b>Loans sanctioned in the 51<sup>st</sup> PSMG held on 30.12.2013</b>			
3.	Construction of Chhuchhakwas Bye-pass in Jhajjar district	Dec-13	53.05	39.79
4.	Construction of Chhara Bypass (Southern Side), Jhajjar	Dec-13	26.89	20.16
5.	Improvement / Construction of Sonipat bypass Phase-II from sonipat Ganaur road to Sonipat Gohana road	Dec-13	73.93	55.45
6.	Improvement of Sanghi – Chhichhrana - Mirjapurkheri-Madina to GLMB road km. 0.00 to 11.078 in Rohtak / Sonipat district of Haryana State	Dec-13	35.97	26.98





**Annexure-V****List of Projects where extension of project completion dates approved**

S.No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Approved revised date of completion
	<b>Haryana</b>				
	<b>PWD (B&amp;R)</b>				
1.	Improvement by way of four laning of Rewari Kot Kasim Road upto NH-8, Shahjahanpur Rewari road upto 6 km., Rewari Narnaul Road (SH26), Rewari Mohindergarh Road, Rewari Dadri road upto proposed bypass	106.07	Nov-08	Dec-10/ Mar -12/ Sep-13	Dec-15*
2.	Construction of 2 lane ROB at Panipat Jatal road on Delhi Ambala railway line at L/C No. 52-C in Panipat District	31.85	Dec-12	Dec-14	Dec-15*
3.	Construction of 2 lane ROB at Hodal Hassanpur road on Delhi Palwal Mathura Railway line at L/C No. 553	24.10	Dec-12	Dec-14	Dec-15*
4.	Two lane ROB at Sonapat Purkhas road near sugar mill on Delhi Ambala Railway line L/C No. 29	40.37	Dec-12	Dec-14	Dec-15*
	<b>PHED</b>				
1.	Providing Water Supply Scheme for Samalkha town Distt. Panipat.	11.94	Aug-11	Jul-14	Sep-15*
2.	Augmentation of rural drinking water supply for Mewat region- Phase- I, Haryana with variations	300.49	Nov 04 and Nov 09	Dec-07/ Nov-12/ Mar-14	Jun-15*



S.No.	Name of the Projects	Estimated cost (Rs. In Cr.)	PSMG Date of approval	Original/ Revised Date of completion	Approved revised date of completion
3.	Water Supply at Sohna Town & Rojka Meo Industrial Area, Sohna	65.34	Nov-08	Dec-11/ Dec-12 / Dec-14	Sep-15
4.	Providing sewerage scheme for Punhana Town in Mewat Distt.	12.50	Aug-11	Jul-14	Sep-15*
5.	Providing sewerage scheme and treatment plant for Hathin Town, Palwal District	12.30	Aug-11	Jul-14	Sep-15*
6.	Development of Sewerage System and Construction of two STPs at Rohtak town.	44.25	Feb-06	Feb-09/Feb-10/Mar-11/ Dec-14	Sep-15*
7.	Providing sewerage scheme and Treatment Plant for Gohana Town District Sonipat	16.00	Jun-09	May-12/ Mar-14	Sep-15*
8.	Providing sewerage facilities in village kosli, Bhakli and Railway station area of Kosli, Dist. Rewari	8.70	Oct-07	Oct-10/Mar-12/ Aug-13/ Sep-14	Dec-15
9.	Providing sewerage scheme and treatment plant for Pataudi , Gurgaon District	14.50	Aug-11	Jul-14	Sep-15
10.	Providing sewerage scheme and treatment plant for Nuh Town, Mewat District	10.27	Aug-11	Jul-14	Sep-15
<b>SADA Gwalior</b>					
11.	Infrastructure Development of Residential Schemes in SADA, Gwalior	76.07	Nov -09	Dec-11/ Jun-14	Sep-15*

\* As requested during the meeting.

